AMERICAN AGRICULTURIST.

Designed to improve the Farmer, the Gardener, and the Planter.

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☞ Personal Letters, or those for the Editor only should be marked *Private*.

See About the Baker's Dozen, page 333.

WORK FOR THE MONTH.

"Yet one smile more departing distant sun,
One mellow smile through the soft vaporing air,
Ere o'er the frozen earth the loud winds run,
Or snows are sifted o'er the meadows bare;
One smile on the brown hills and naked trees,
And the dark rocks whose summer wreaths are cast,
And the blue Gentian-flower that in the breeze
Nods lonely, of her beauteous race the last.
Yet a few sunny days, in which the bee
Shall murmur by the hedge that skirts the way,
The cricket chirp upon the russet lea,
And man delight to linger in thy way,
Yet one rich smile, and we will try to bear
The piercing winter frost, and winds and darkened air"

BRYANT.

How silently has the sun stolen southward, looking in now at windows, and casting his warm beams upon carpets that were unblest with his smiles all the summer long. The gorgeous drapery of the forest has gone, and the maples and walnuts no more flame in gaudy red and yellow. Here and there only an oak, tenacious of its russet leaves, reminds us that the foliage has had its reign, and that the summer is ended. The leaves lie scattered through the forests, and by the road side, and give back a lonely sound to the tread of the hunter. The nuts have been gathered, or lie scattered among the burrs, and shells. The blithe squirrel with tail erect, and comfortable memory of his winter hoards, barks cheerly among the boughs. His knot-hole in the hollow chestnut, or oak, is his castle, and thither he retreats when the dogs pursue him.

There is a cool bracing atmosphere at morning, and the white frost lies glittering upon the grass as the farmer goes forth to his morning duties. The cattle still glean something from the fields, though the glorious green of the aftermath is gone. Work out of doors is no longer pressing, and the industrious man now appreciates and enjoys the fruits of his summer labors. The fire-board has already been removed from the hearth for the winter, and the blazing wood throws an air of cheerfulness over the happy family circle. The winter school has begun and the younger children are already at their studies. The older will soon follow, as soon as the last harvest work is done, and the old wall reset. What occasion has the farmer for cheerfulness and thankegiving, as he looks around upon his comforts. A kind Providence has blest him in his basket and his store. His barns, and granaries are full, and his cellar stored with vegetables. His bins are full of apples, and his meat barrels, if not already stocked, have their filling in certain prospect. Sleek porkers revel in hominy and clean straw, and beeves stuff their round bellies to make rounds of beef. The young pullets with combs of fiery red have deposited their first egg, and made noise enough for a whole litter. Thrift and plenty are on every hand, and now if there be a contented mind, what home so happy as the farmer's. No famine-price of bread can mar his peace. He has corn and meat to sell. No rogue can run away with his capital. His bank is one of earth and its deposits never mysteriously disappear.

The long evenings have come, and gathered around the blazing hearth, with wife and children, he may enjoy life. He has cultivated his acres diligently, and he may now cultivate his mind and heart. He has his journals and books, and can read the accounts of horticultural and agricultural exhibitions such as he has not been able to visit. He can read up the political speeches that were necessarily laid aside during the harvesting of corn and potatoes. He can turn from the present to the past, and study the history of former generations.

November is to us one of the most enjoyable months of the year. The fine bracing air, neither too hot nor too cold, gives a zest to all labors and pleasures. The storms of the wild equinox are over, and those of winter have not yet commenced. The beautiful soft haze of the Indian summer robes the distant hills and throws an air of enchantment about every prospect.

But in the few sour and stormy days that come we have a foretaste of what is in store for us. The sun grows lower in the southern horizon, and can not much longer withstand the onward march of winter. Let his departing smile admonish us

TO SET OUR HOUSE IN ORDER.

Winter will soon be upon us with its drifting snows, its driving rains, and terrible frosts. If the roof is not tight, call in the carpenter and fix it the first fair day. Already the leaks have spotted the paper upon the walls, and the carpet upon the floor. This is poor economy. Stop the leaks. Last winter, possibly, the potatoes were frost bitten in the cellar, and bushels were thrown away as useless. The pump pipes perhaps were frozen and burst. Now take time by the forelock, and bank up all around the house before the ground is frozen. Better have the cellar windows darkened with straw, or sea weed, than to have frost doing such mischief. Now is the time for this work.

TIGHT BARNS

also are an item of great importance for the health and comfort of cattle, and for the easy conscience of owners. If you would rest well in the zero nights of January, make provision to shelter all the stock upon your farm. Cracks should be battened, and the barn be made so tight, that ventilation at the top will be necessary. It takes much less hay, and provender to winter cattle in a warm stable, and they come out sleek and fat in the spring. It is not yet too late to bring

WATER IN TO THE YARD.

There is great waste of manure, and flesh on the part of cattle, and of time and labor, on the part of the owner, in driving cattle a half mile to water in the winter. A barn is frequently commanded by hills in the neighborhood that will furnish an abundant supply of water. A lead pipe laid below frost will introduce it, and save time and money.

STORING ROOTS.

This should now be attended to without much delay. Severe frost injures the keeping quantity of most of the roots. They should be harvested in dry weather, that they may be as free from dirt as possible. All leaves should be carefully removed from them, that there may be nothing left to decay. The unpleasant smell arising from turnips in the cellar is generally owing to a neglect of this precaution. Ventilation is important, and they should be put up in narrow bins to prevent them from heating. Potatoes should be stored in a dark cellar safe from frost. They are more injured by light, and frost than other roots. Assorting them is good work for rainy days, if that have not been already done. The smallest potatoes cooked, make good beef and pork. The middling size we use for seed, and the largest are for market and the table.

White field turnips will stand the frost and even continue to grow until they freeze into the ground; but their keeping quality is injured by the frost. Pulled in October before hard frosts, they do not become pithy so soon. The tops should be close cut to prevent sprouting.

Beets are injured by frost below 25°. The

crowns turn black and decay. The late fall rains too cause a second growth of roots and change a portion of the saccharine matter to woody fibre. Any gain in size is lost in quality. Harvested early, they will keep well in a cool dark cellar until spring.

The white Belgian carrot which grows high above the ground is injured by freezing, while the orange and other varieties covered with earth will endure 20 degrees of cold, or even keep sound through the winter. We have had them freeze through in the root room without apparent injury.

Swedes and Ruta bagas are very hardy, and may go in last. A root-room adjoining the barn is the best place to keep them, and if such a place has not been already provided.

A ROOT ROOM

should be among the earliest investments of a little spare capital. Roots are coming in to use more and more in this country, and deservedly. They are raised more easily than grain, and go much further, acre for acre.

Parsnips are improved by freezing, and may remain out all winter. Care should be taken to have no water stand about the tops. The crowns sometimes decay from this cause. They are a very nutritious feed for pigs and cows, but when they bring a dollar a bushel in market, as they often do in the first three months of the year, it is best to sell them. Carelessness in storing roots has often led to great loss and discouraged the farmer from growing them.

FATTENING SWINE AND CATTLE.

No time should be lost now in preparing them for the butcher. They take on flesh more easily in warm than in very cold weather. It is a matter of great importance that they should have full feed, at regular times, warm stalls, and beds, and be kept quiet as possible. Cooked food goes much further than raw.

CARTING MUCK.

Some farmers remove the manure that has accumulated in the sheds and yards during the summer, at this season, and make piles of it upon the green sward that is to be turned up next spring. They put in muck enough to absorb the gases, and make the heaps high so that they will not take too much of the rain. This helps forward the spring work very much, and on this account is a good usage. Where this is done the yards and stables should be immediately supplied with muck thrown out from the swamps and ditches a year ago. Muck is to be always on hand, as work to fall back upon, when other business is not pressing. It must not be neglected even in the busiest season. The making of manure is a fundamental business upon the farm. It is to cultivation, what action is to oratory, the first, middle, and last thing, and if the farmer would make his crops talk with Demosthenian eloquence, he must insist upon MANURE, *manure*, MANURE. Keep the teams carting muck until the yards, sties, privies, and stables are well stored.

THE RATIO OF STOCK TO FODDER.

This is sometimes lost sight of, and if the farmer could only lose sight of the miserable lean kine that come of it in the spring, it might answer. But ribs and hip bones will stick out, proclaiming the folly of keeping cattle on a scanty diet. Ten cows well fed will give more profit, than fifteen, pinched for food through the winter. Therefore either sell off your surplus or make up your mind to buy fodder. Do not think to make swamp hay or salt marsh do the work of corn fodder or herd's grass. An animal's stomach is proof against any such fraud.

GATHER LEAVES.

They lie now frequently in heaps and rows, in the corners, and under the walls, where they may be easily secured. Soon the winds will scatter them, or the snows will cover them, and they will be lost. Leaves are among the best fertilizers within the reach of the farmer. They are good bedding for cattle, good in the compost heap, and hot bed in the spring. Save all within your reach.

LOOK TO YOUR DITCHES AND DRAINS

that they may be ready for their winter work. The cleanings of the ditches are good material for the compost heap.

RIDGE YOUR GARDENS.

The frost will do a good work for your subsoil, if you will give it an opportunity. The ridges may be made with a heavy plow or with the spade. Ground that is wanted for early crops should be manured before ridging. Make the ridges at least two feet high, and let them be as close together as is possible with that depth. The subsoil will be pulverized by the frosts, and will receive some ammonia from the snows and winter rains.

CLEAN CHIMNEY AND STOVE PIPES.

This is a matter that you should not leave to the future. A chimney on fire in a windy, zero night is a poor lullaby. See to this matter in person, or at least know that it is well done. A chimney may be fired with a bundle of straw in a rainy day with safety.

STORES FOR THE MIND.

While you are providing for physical comfort during the winter, do not forget a good stock of reading. There are points in your husbandry that you have not yet settled. Seek light on these topics and make yourself a well read and intelligent man. Nothing pays better upon the farm, than science united to practical skill. Take a good supply of agricultural and horticultural papers, that you may know what progress husbandry is making in all parts of the land. The periodical press is now pouring forth such floods of choice literature, and standard works are so cheap, that every one can supply his household.—ED.

STRYCHNINE ANTIDOTE.—Mr. C. Leavitt, of Rockville, Connecticut, informs the Scientific American that a valuable dog poisoned by strychnine, and fast sinking under its influence, was cured by half a pint of strong coffee.

The eye's eloquence, twin born with thought outstrips the tardy voice?

CALENDAR OF OPERATIONS.

NOVEMBER, 1856.

[We give from month to month, besides our leading article, "Work for the Month," a Calendar of some of the more important operations in the field, garden, &c. These are adapted to the latitudes of 41° to 42°. A little allowance must be made for each degree of latitude—later north, earlier south. An early season, or a late one advances or retards operations, so that we shall need to revise and adapt these tables to each year.

The letters f. m. l. refer to *first*, *middle*, and *last* of the month.

Doubling the letters thus: ff., mm., or ll., gives emphasis to the particular period indicated.]

FARM.

Barns—Have in readiness for cold weather, with stalls and mangers prepared for cattle and horses.

Barn-yards—Keep well supplied with muck, and guard against drainage as directed last month.

Beeves—Continue to feed if not already fit for the butcher. Complete fattening before severe weather and finish by giving corn, or Indian meal.

Buildings of all kinds—Look to see that they are in good condition, and of sufficient number to protect both *bipeds and quadrupeds* from the severe cold and driving snows of the approaching winter.

Cellars—Remember the frozen roots of last winter and guard against a repetition, by timely banking up with spent tan or saw dust, and doubling the windows or even darkening them rather than have frost in the cellar. Ventilation should not be closed, however, until severe cold requires it.

Cisterns, both for house and barn may be made during the early part of this month if not already done. Instead of driving the cattle a distance for water, collect from the barns and sheds that which would otherwise wash the yards, and conduct it into large cisterns so that a horse or other animal may be watered at a moment's notice.

Draining may still be continued during the greater part of the present month.

Economy of the Farm—Give store stock of all kinds sufficient food as the pastures fail, that they may commence the winter in "good heart." Complete fattening whatever is to be killed early; as less food is required now than in cold weather. Keep stock warm and sheltered for the same reason. Look over the farm, about the buildings and among the tools, and do whatever you can to save labor in the spring. Make manures assiduously, bearing in mind that if each cord costs you two dollars worth of time and labor, it is even better than to pay that much away for, perhaps, an inferior article.

Fattening stock of all kinds—Complete before severe cold weather requires a portion of the food to be used in keeping up the animal heat.

Fowls—Give cracked corn, mashed potatoes, &c., for two weeks to those you are fattening. Feed *meat* to hens as soon as the cold weather deprives them of their supply of worms and insects. If an animal dies a portion of the meat may be sliced off and hung up to feed out daily. The increase in eggs will much more than pay cost.

Frost—Guard against, both in cellars and about water pipes, which if exposed, should be boxed and filled in with tan or sawdust, or wound with straw.

Grain—Thresh ff. if not already done, preserving the straw for feeding and bedding.

Hogs—Give full supply of food so as to fatten early. Cooked food is much to be preferred, finishing by feeding corn or Indian meal. Keep the yards well supplied with muck, leaves, turf, mold, &c., all of which may be converted into excellent manure.

Manures—Continue manufacturing by collecting leaves—which are now abundant—scrapings from the woods, muck, turf, loam, &c. These can be used in the stable, barnyard, hog-pen, and privy, to absorb all the iquid.

Plow stiff clayey soils, leaving the ground in ridges to be acted on by frosts. See article on another page, headed "Plow the field and spade the garden."

Roots—Throw more earth upon the pits and gradually close the opening at the top as the weather becomes severe.

Stone fences or walls may be laid during this month. See article on another page.

Tools—Put away those not in use, repairing them if necessary that they may be all ready when wanted.

Turnips—Harvest Ruta Bagas m. to l. or as soon as the leaves begin to wilt from severe frosts: store them in cool dry cellars or put in pits or stacks as per directions on another page.

Winter grain—Keep cattle and especially sheep from feeding it down at this season, which is injurious to the roots.

Wood—Previous to the fall of snow in northern latitudes, the "down stuff" or fallen trunks of trees with which many forests abound should be cut and either carted to the house or piled up where it can be readily loaded upon the sled, and drawn out after the first fall of snow. Clear and level the ground for roads where you are to get the winter supply.

ORCHARD AND NURSERY.

Apple Trees—Set out ff. earthing them up a little to guard against blowing over.

Cherry Trees—Plant out standards ff. to m. on dry soil, or if wet, it should be drained.

Grounds—May be prepared for spring planting if not already done, by subsoiling or trenching, &c. See article elsewhere.

Mice—Guard against ravages in orchards, nursery rows and hedges, by cleaning away grass, weeds, &c., from the trees. Give the trunks of standards a coating of tar or other offensive substance.

Nursery Rows, especially upon moist heavy ground should have furrows turned towards the trunks, thus opening drains to carry off the water between the rows. This also prevents the frost from throwing the roots out of the ground.

Packing trees and shrubs is an important operation of the nurseryman during this month, and should be perfo rmed with reference to the distance they are to be sent. If transported far, the roots should be packed with moss, and covered with mats or bags, and the trunks and limbs well strawed up.

Pear Trees—Set out ff. to m. heading back long straggling branches, or a too upright top so as to give a sort of compactness to the head. See articles on transplanting, and also on Pears in this number.

Plum Trees may be set out at this season, but we prefer spring planting, especially in northern latitudes.

Pruning may still be done both in orchard and nursery.

Quinces—Plant ff. to m. the same as pears.

Raspberries—Plant ff. to m. Cover tender varieties m. to ll. or before the ground freezes.

Seeds of Apples, Pears, Quinces, Plums, Cherries, Peaches, &c.—Put in boxes of earth or plant ff. if not already done.

Straw up tender trees and shrubs as they stand in the ground, m. to l.

Taking up fruit and ornamental trees constitutes an important part of the nursery work for this month, and should be industriously pursued during the early part of it, or before the ground freezes, to retard the operation. Preserve as many roots as possible without splitting or lacerating them.

Transplanting may be done during the month or until the ground freezes, but it is better to set out early. Dig good sized holes, and having the trees taken up with care, expose the roots as little as may be to the sun, and none at all to the *frost*. See article last month.

Trench and manure grounds for spring planting ff. if not previously done.

KITCHEN AND FRUIT GARDEN.

Artichokes—Dig and store for winter use, f. to m.

Asparagus—Dress and cover with coarse manures, straw, cedar, or other evergreen brush, &c. Plant out new beds, ff. trenching the ground and manuring heavily.

Bean Poles—Collect and store away in winter quarters.

Beets—Dig and store ff. if not done already. See article on keeping roots.

Blackberries—Plant ff. on deep rich soil.

Cabbage—Harvest m. or before the ground closes. Protect during winter by placing them head downwards upon dry ground in rows, and bank up sufficient earth to cover all but the roots. Cover plants in cold frames as severe weather approaches.

Cardoon—Continue earthing up ff. Protect during winter, same as celery, which see.

Carrots—Dig and store ff. to m. according to the weather. See article on keeping them.

Cauliflower—Plant out m. in well prepared beds with frames for their protection. Cover with sashes as heavy frosts approach, admitting air daily unless the cold is severe. Harvest and store mature flowers.

Celery—Earth up ff. Harvest, and protect for winter m. to l. See article on another page.

Cold Frames—Make ready ff. as they will be called into requisition m. to l.

Compost—Prepare for hot beds, and for spring use.

Currants—Plant out ff. to m. Cuttings may be taken off and kept in sand or earth, in cellars for spring planting. See article on page 304 of October number.

Drain wet lands for early spring gardening.

Figs—Cover, or carry to cellar, or cold grapery.

Gooseberries—Plant out ff. to m. same as currants.

Grapes—Cover tender varieties m. to l. Plant ff. to m. Old wood may now be cut out and the vines thoroughly pruned.

Horse Radish—Dig up what is wanted for winter use, covering with earth in the cellar.

Hot Beds—Prepare compost and collect leaves for them, ff. to m.

Lettuce—Plant in frames f. to m. covering them upon the approach of severe weather.

Mushroom Beds—Collect fresh horse droppings and make beds ff. to m. Attend to former ones, covering with brush and boards as cold weather comes on. Wet down with tepid soft water if the beds begin to fail.

Parsnips—Dig and store in the cellar what are wanted for winter use, covering with earth. Leave those for spring use and for seed in the ground.

Potatoes—Dig both common and sweet varieties ff. if not already done, storing from the frost. See directions for keeping roots on another page. Also a communication on page 327.

Pumpkins—Place in cool dry situations under cover, until severe frosts require their being removed to the cellar, or other place where they will not freeze. Warmth and dampness are both injurious to the pumpkin.

Raspberries—Lay down and cover tender varieties m. to l. with litter or earth. Make plantations ff. to m. on subsoiled or trenched, well manured land.

Rhubarb—Plant out ff. to m. dividing the roots to single crowns if desired.

Salsify.—Dig for winter use f. to m. covering in the cellar. Leave in the ground that wanted for spring.

Spinach—Cover with cedar brush, salt hay, flags or straw, or protect in frames during the winter.

Squashes—Protect same as pumpkins.

Strawberries—Cover with coarse manure or straw, m. to l.

Trench or subsoil grounds for early planting, ridging heavy or clayey soils.

Turnips—Dig and store m. to l. according to the season. See article in present number.

FLOWER GARDEN AND LAWN.

Amaryllis, Tigridias and Tuberoses should be lifted ff. to m. and thoroughly dried. Pack in boxes of dry sand or moss, and place in a room or airy cellar, away from frost or moisture.

Bulbs—Lift late blooming varieties and remove to a dry cellar. Holland bulbs may yet be planted ff. if not done last month. Those intended for winter blooming, in hand glasses, should be placed in them ff. and kept in a cool room for about two weeks, when they may be taken to warmer quarters.

Carnations, Pinks and Pansies in pots—Place in frames for winter, filling around the pots with leaves, sawdust or tan. Cover those in beds with leaves or frames.

Dahlias—Lift and clean from earth ff. taking care not to shake them so as to break off the tubers. Cut off the tops and label with care and hang up, or put in boxes of sand in cool dry cellar, or room away from frost.

Dasies, Polyanthus, &c., planted in sheltered situations last month, should now have a covering of leaves to protect them from severe frosts.

Erythrinas—Lift and keep as Dahlias.

General appearance of Grounds—Collect and lay away all stakes, poles, &c. Rake and sweep up the decayed leaves from the alleys and lawn, using them as covering for tender plants. After covering carnations, pansies, dasies &c., with the leaves, throw over the whole a light covering of tan or loam, to prevent the leaves from blowing about. Let every thing be put in good order, with an aspect of neatness, that the eye may even contemplate with pleasure the grounds where are hibernating those plants which no longer gladden the eye with their beauty, or fill the air with fragrance.

Gladiolus—Take up ff., and label, and either hang up, or put in boxes of sand in dry cellars, or rooms where they will not freeze.

Half hardy shrubs, or large herbaceous plants should be protected as the weather becomes severe, by covering with mats or placing barrels over them with a few holes in the top for ventilation, or they may be covered with rye straw neatly bound around them.

Primroses—Protect as Dasies.

Roses—Straw up tender varieties, or put them in a frame. Ventilated barrels or boxes will do to place over them.

Shrubs—Hardy varieties may be transplanted ff. to m.

Stakes, Dahlia poles &c.—Collect ff. and preserve under cover for another season.

Stocks and Wall Flowers—Put in frames and protect as carnations.

Trees—Plant deciduous ff. to m. about the lawn, digging large holes and filling around the roots with rich earth.

Water sparingly as needed, but never when the ground is frozen.

GREEN AND HOT HOUSES.

Air every mild day, taking care not to al-

low the temperature to fall below 50° in the hot house or 45° in the green house.

Borders—Spade or fork over and manure.

Bulbs—Do not give too much water. If those intended to bloom in glasses are not already in, place them there ff. and keep in a cool appartment for about two weeks, when they may be carried to the hot house for blooming. By bringing a few in each week, a succession may be kept up during the winter.

Camellias—Give plenty of air and water, syringing the foliage often.

Cleanliness should be attended to, washing and syringing the plants, collecting the decayed leaves, sweeping the floors, &c.

Chrysanthemums—Water freely.

Fire—Keep steady heat, ventilating when there is an excess.

Geraniums—Turn often, that the opposite sides may be equally exposed.

Roses—Cuttings of some varieties may still be made. Tender varieties should now be brought in or placed in pits.

Shutters—Have in readiness, and use if very severe weather should occur.

Strawberries—Begin to force.

Tobacco Fumigations—Give as is necessary to destroy insects, using sulphur if mildew or blight make their appearance.

Water—Give two or three times a week, from cisterns in the houses, the water of which has not only become temperate, but by its evaporation tends to prevent that dryness in the atmosphere which would otherwise be the case.

PLOW THE FIELD AND SPADE THE GARDEN THIS FALL—WHY?

Almost our first editorial article was one in favor of stirring the soil in Autumn, both in Garden and Field. Every subsequent year's experience and observation have strengthened our conviction of utility. Aside from theoretical consideration, we have known a great number of actual trials by different individuals, all or nearly all of whom speak decidedly in favor of breaking up the ground as deeply and thoroughly as may be before it is closed by frost. Here is one to the point: A reader of this paper, a farmer in northern Ohio, who was "set agin" this fall plowing, called upon us in October, 1855, and we had quite a discussion over this subject, the result of which was a "compromise"—he agreeing to treat one half of a field after our plan, and the other half in the old way.

The soil was somewhat heavy, a clay loam, designed for a crop of spring wheat. The third week in November, a double team was put before a large plow, and the ground back-furrowed into narrow lands, only four furrows turned together. The intervening dead furrows were made as deep as the plow could be put in, and left open at the lower side of the field for the escape of of the water. Three acres were thus treated and three left untouched until spring.

On the 17th of May last Mr. L. wrote us that the part plowed last fall was very mellow, and so free from water that he actually harrowed it down nearly level and sowed it to wheat, before the rest of the field was dry enough to commence plowing.

A letter just received from him says: "I give it up. I shall plow all my land for spring crops this fall. The spring wheat on the plowed portion started much earlier, grew better, and yielded almost one third more. Stir up the farmers to plow all the land they can this fall, you cant do them a better service."

So much for Mr. L.'s experience in one trial. His is a marked case. The snow continued on the ground quite late last spring, and every day gained by having the ground previously plowed and drained was important. Again his soil is a heavy one, almost, and in some places quite a clay, and therefore most likely to be benefitted by thorough freezing. It is not best to jump at general conclusions from a single experiment. But we have numerous other examples, enough perhaps, to estahlish a general rule in favor of fall plowing all heavy soils.

Last year we described the practice of a successful gardener of our acquaintance who spades up nearly an acre every Autumn, throwing it into very high ridges like the following:

ΛΛΛΛΛΛΛΛΛΛΛ

We saw the same garden the past summer and it continued to give evidence of the beneficial effects of such a course. The ridges freeze through, and in thawing crumble down, while the frost penetrates down below the bottom of the furrows, and the whole soil is rendered pulverulent and improved, and enriched by the ammonia collected from snows, rains, and the air during winter.

There are several advantages derived from fall plowing, part of which have been hinted at above:

The teams are generally in better condition for work in the fall than after passing through a long winter.

There is generally more time for plowing in fall, than in spring when getting in the spring crops, carting manure, &c., all crowd together.

Ground plowed in ridges, with deep open furrows between, dries out sooner, and on wet land several days may be gained, which is often enough to turn the sale in favor of a good wheat or oat crop. This was the case with Mr. L., described above.

The action of frost is very important in destroying and pulverizing the mineral elements and thus reducing them to that fine impalpable state necessary to giving a good medium for the growth of roots. See remarks in last number under "Why Clay benefits Sandy Soils."

Much poisonous matter in the soil is destroyed, since the frost and air penetrates a double depth where deep open furrows are left.

The organic or vegetable matter, such as roots of plants, are decomposed more rapidly when subjected to freezing and thawing, as is the case when the ridged soil is more thoroughly exposed to frost.

The roots of dock and other noxious weeds are more thoroughly killed out.

Insects that burrough deeply in the soil are killed by exposure to frost.

These considerations are enough, we think, to recommend plowing all heavy soils in autumn, where it can be done without serious neglect in the saving and threshing of crops already grown. Light, dry, sandy soils do not so strongly call for such fall treatment, though we think any soil will be benefitted.

n the case of garden soils, or those submitted to a high degree of cultivation, we recommend in all cases to subject them a thorough ridging and spading before they are frozen so much as to preclude the operation, and if it be neglected then, let it be attended to during winter, if the ground chances to be thawed out at any time.—Ed.

SHADE TREES.

Hints About Planting, and Description of some of the Best—How to Move Large Trees, &c.

For all Northern regions, where the frost has killed the leaves, the last of October and the first of this month, is the best season for transplanting deciduous (leaf-shedding) shade trees. The general rule is *move them as soon as the leaves fall.* The earlier after that period the better, though better late than never.

For a large tree, which is not to be moved far, a good plan is to dig a trench around it now, at a greater or less distance from the trunk, according to the size, and let it remain until the ground is hard frozen to a depth of eight to twelve inches. Then dig under it and cut off some of the deepest roots, and with a rope attached to the trunk or large limbs, lower it down cautiously, leaving a large mass of frozen earth attached firmly to the roots. Put it upon a "stone-boat" or sled, and move it to its new location. For a large tree, two sleds, or two pairs of wheels may be used, taking care not to break the branches or fracture the bark upon the trunk.

Now dig a hole just to fit the mass of earth, set up the tree and put on stones enough around the roots to keep it from being blown over. When the ground thaws, a tree thus moved will put forth leaves, and grow just as well as if left standing in its native location. However, if many roots are cut off it is well to cut off a corresponding amount of the limbs.

We have assisted in moving in this way some trees a foot in diameter, and 25 to 40 feet in hight, and have not known a case of failure. We saw an elm, 18 inches in diameter, and over 30 feet high, moved four rods, without at all checking its growth. In this case, a mass of frozen earth, twelve feet in diameter, was left attached to the trunk. The earth was dug out under one side at a time, to cut off the deep roots, and then filled in again. When it was all loosened in this way, the earth was beveled under the side towards its new location, and boards thrust under for it to slide upon. Other boards were then laid at the end of these to form a floor for it to be moved over. A mass of straw was put around the trunk and bound on with heavy ropes. To these ropes a chain was then attached, and three yoke of oxen hitched on. A number of men took hold of ropes, previously fastened to the limbs, and kept the tree upright while drawn to its new position, when it was lowered into a ready-prepared excavation. This was

in 1842, and the noble elm has ever since flourished. A house stands upon its old site. As the neighbors lent a willing and free hand in the removal, the cost was trifling, while a hundred dollars would not have purchased the tree the summer after its removal. We have narrated this instance to show what may be done in extreme cases. We have seen scores of small and large trees transferred in mid-winter, from the forest to the door-yard, lawn and road side, with the best success, and we are not quite sure that this is not the best plan even for small trees, where the distance is not great. The great advantage of this method is that the frozen ball of earth retains the small roots, which are the real feeders of the tree, unbroken; and there is no check to the foliage or growth, and no loss of time. But this plan is not necessary. It is more agreeable to transplant trees during the warm comfortable weather of this month. Follow the suggestions given last month in full, which apply to shade and fruit trees, and there need be no fear of failure.

WHAT SHADE TREES TO SELECT.

We have a growing affection for the native trees of our own forests. We could not be tempted to exchange the long rows of symmetrical maples that stand upon each side of the street before our homestead. Anything else would now seem to be out of place. We should, perhaps, love them as well were they arching elms, or lindens, (basswood,) or any one of half a dozen native varieties.

But there are a large number of both native and imported trees which possess peculiar merits, and from which a selection may be made to suit the taste, circumstances, or locality of the individual planter of trees, or associations engaged in adorning streets or public grounds. Last year, with the assistance of some gentlemen of acknowledged taste and judgment, we prepared a carefully written article describing some of the best shade trees. We here republish a part of that article for the benefit of our present readers, who number four times as many as at this time last year.

A smaller class of trees is required for the streets of cities and compact towns, than for parks, and for more thinly settled villages, and the grounds surrounding rural residences, where there is abundance of room.

For compact streets, we recommend the following as among the best: Oriental Plains, Paulownias, Catalpas, and the Silver-Leaf Poplar.

The Oriental Plain is a pyramidal tree, with clean stem and foliage, is scarcely exceeded in the rapidity of its growth, and has as yet no insect enemy.

The Paulownia is of very rapid growth, has a large leaf, often two or more feet in diameter on young trees. We measured some of them the past season that were over two feet in diameter. The size of the leaves diminish with the growth of the tree. These leaves resemble the ordinary Palm leaf fan. The tree is perfectly hardy in this latitude, though introduced originally from the climate of Japan; and it is chiefly remarkable for the exceeding beauty of its flowers, which, before the leaves appear in the Spring, cover the trees in large clusters, from six to nine inches in length. The flowers are of a rich purple color, and fill the whole air around them with a fragrance. This tree bids fair to supplant the Ailantus, as it grows quite as rapidly, excels it in many things, and is without its objectionable features. At this season the buds present a beautiful appearance.

The Catalpa is more generally known, and need not be described. The only objection to this tree is that its "pods" or seed vessels furnish the rudiments of cigars to "Young America."

The Abele, or Silver-Leaf Poplar, grows as rapidly as any one of the others. The upper side of the leaf is of a rich dark green, the under side a silver white, and the contrast of these colors produces a pleasing effect upon the eye, when the leaves are set in motion by the wind. It is, however, only fit for paved streets, on account of the multitude of suckers it throws up from open ground.

For open streets and grounds the following list comprises the most choice collection; we place first in order those which we consider the best, all things taken into account: Silver-Leaf Maple, Oriental Plain, English and American Elms, Tulip-trees, Sycamore Maples, Sugar Maples, Pin Oak, Scarlet Oak, Burr Oak, Catalpa, Linden, Deciduous Cypress, Liquidambar or Sweet gum, Laburnum, Cucumber Magnolia, Kentucky Coffee-tree, &c. This list embraces all those recommended for streets, except the Silver-Leaf Poplar, which is left out for reasons given above. We omit the Evergreens, as we recommend setting them in Spring, unless it be done early in Autumn. Most of the above trees can be obtained of first-class nursery men, and they may all be set in Spring, but we prefer this season of the year, if it can be done before the ground becomes solid.

The Silver-Leaf Maple in its foliage somewhat resembles the Silver-Leaf Poplar, and is by many persons preferred to it. It is the most rapid growing of the Maples.

The other Maples are well known as strong robust growing trees, with thick, dense foliage, holding on to late in the Autumn; and they are among the most desirable of shade trees.

The Elms are well known—the American for its gothic arch, and the English for its dense foliage.

The Oaks are of a more slow growth, and are well known. The Pin Oak is the finest of them, on account of its pyramidal form, and glossy foliage.

The Linden, (basswood,) is known for its symmetry of form, and the Mountain Ash for its beautiful red berries.

The Deciduous Cypress has a soft feathery foliage, of a delightful light green, and very unique in its character. We recently noticed one of them in front of the residence of Mr. S. B. Parsons, of Flushing, L. I. The foliage, at this season, is of a rich maroon color, and contrasts finely with the green terrace near it.

The Liquidambar, or Sweet-gum, has a star leaf, which assumes a beautiful red tint in Autumn. This is one of the finest *native* trees, and is not half as well appreciated as it should be.

The Laburnum is noted for the abundant clusters of rich yellow flowers with which it is clothed in June.

The Cucumber Magnolia is a tall growing tree, with large leaves and symmetrical habit.

The Kentucky Coffee is a handsome tree, its light foliage somewhat resembling the Locust. It produces a bean which was used as coffee by the early settlers. (The flavor of the fruit from the cultivated tree is, in our opinion, *not* equal to that of Mocha or Old Java.)—Ed.

FARMERS' CLUBS.

The club room is among the prominent institutions of city life. Almost all trades, arts, and professions have their associations, and regular reunions, where social culture and enjoyment mingle with the discussion of their peculiar interests. There are objectionable proceedings no doubt, oftentimes, at these meetings, but these will always depend upon the character of the associated. That every pursuit should have its guild or association for the cultivation of fraternal feeling, and for the discussion of the principles and news which pertain to itself, we believe to be eminently praiseworthy and useful.

Such societies among farmers, until quite recently, have not been possible, except in favored localities, because it was thought that this calling had neither science or news to discuss. The oldest inhabitant in the rural districts saw nothing different in the husbandry of his old age, from that which prevailed in his youth. All was stereotyped from the "planting of corn when the white oak leaves were of the size of a mouse's ear," to its harvesting early in November. If in any calling Solomon's saying "There is nothing new under the sun," went unquestioned, it was among farmers. If they came together, it was for the discussion of scandal or politics, rather than to learn anything new in regard to the science or practice of husbandry.

But a new spirit is abroad among the cultivators of the soil, and farmers' clubs are no longer a doubtful experiment. They have been tried in many localities, and have been found not only interesting and profitable to their immediate members, but to furnish valuable information to the public through the agricultural press. It is now felt among the best cultivators, in almost every community, that agriculture is still an experimental art, and that the man most thoroughly booked up in all the details of the business, is probably ignorant of much more than he *knows*, of matters pertaining to husbandry. Farmers have become learners, and receive with eagerness all new crops and new methods of cultivation, that promise to be improvements.

We think the time has come when the club will be appreciated among farmers, and when the leading men in every neighborhood should seek to establish a stated meeting for mutual improvement in the cultivation of the soil. There is now not only a great deal of information to be gathered from the agricultural press, that would be available in such meetings, but every such neighborhood would glean from the field of its own operations, new facts, that would be of service to the science of husbandry. No intelligent tiller of the soil, who observes closely the phenomena of animal and vegetable growth, can fail to find many things in his own practice, from year to year, that will be of great advantage to his fellow cultivators.

Farmers' clubs are an important means of self-culture. The weekly or monthly discussion would draw out of every member the narrative of his own experience in husbandry. It would tend to form the habit of ready public speaking, which is of great service to every citizen, and a talent too little cultivated among farmers. They have rarely attempted it, and are scared at the sound of their own voices, even in a meeting in the district school-house. But crops and stock are matters on which they are so well posted, that they could have no lack of material, or of interest, and out of the abundance of the heart the mouth would speak. This habit once formed, would soon show itself in other pursuits, and if it became general, it would greatly increase the influence of farmers as a class in the community. It is important that they should learn to talk as fluently, and as much to the point, as any other class of men.

The club, too, would have a very happy social influence, especially if the meeting should be held at the several houses of the members in regular succession, and if the wives and daughters should form a part of the company. This element mingles too little in farm life. They often live remote from neighbors, are pressed with business, and find it difficult to make a call with no special object in view. In the club, business and social pleasure could be united, and its influence would soon be seen in healing old feuds, and in brightening old friendships.

The meetings would add much to the stock of information among the members. We rarely spend ten minutes in conversation with a farmer, or visit a garden, where we do not learn something that proves of service to us in our own cultivation. The experience of every tiller of the soil is useful to his neighbor just as he becomes acquainted with it. There are a great variety of pursuits among cultivators. Some make a specialty of stock-raising, others of fruit-growing, and others still follow a varied course of agriculture. Some give themselves wholly to farming, while others follow a profession or mechanical art, and simply till a garden. The club would bring all these classes together, and elicit the information which each possessed for the common benefit of the whole. Each has observed something which his neighbor has overlooked, or has never had the opportunity of observing. The pastor has found a new remedy for the pear slug, and the lawyer has outwitted the curculio and trapped him at last. The stock-grower has treated the horn-ail and the horse distemper successfully, and the dairyman tells us the secret of the fine cheese which always brings an extra price. It would be impossible for such a company to meet together for the winter, without mutual improvement.

Besides this, the club, if followed up, would beget a habit of careful observation, which is very much wanted upon the farm, as in all other callings. The man accustomed to hear the results of the observation of others, and to profit by it, would not fail to open his own eyes, and watch the the signs of the times in his fields and among his stock. *The fact that we have occasion to use knowledge, leads to its acquisition.* There many unsettled questions in husbandry, that would soon be investigated in the field, if there was a community of interest in the undertaking. Twenty or thirty farmers associated for a common object, would accomplish much more in the study of the science of their calling, than the same number of minds working alone.

In every respect, we think, such clubs would have a most happy influence upon all the members, and upon the farming interest. The time has already come to begin them, and a smart, enterprising farmer, cannot do a better work than to start a club in his own district. If you can find a half dozen to organize with, it is enough. If you cannot find any better place of meeting, take the school-house, which serves almost every good purpose in the country. It may as well be a school for the fathers, as for the children. Never mind anything about the constitution or by-laws. The less formal the meeting can be made the better. A few rules are well enough, but are not at all essential. If you can arrange to take a large number of papers devoted to rural affairs, and exchange them among the members, it will be well enough. But the main thing is the regular meeting for the discussion of some topic, designated before hand, so that all can gather their thoughts, and be prepared for the discussion. Reader, will you not try to start a club in your neighborhood?—Ed.

WHAT SHALL BE DONE WITH THE MICE?

The amount of injury done to fruit trees by mice during last winter is almost incredible. All through the summer, report after report has reached us of large flourishing orchards almost entirely destroyed by these wily depredators. There has been little noise and excitement on this subject, owing to the circumstance that the extent of the mischief has been but gradually developed. Even where the barking of the trees was above ground so as to be readily seen, most orchardists hoped to save many of their trees by applying various substances, and they have been loth to come to the conclusion that their favorite fruit trees, so long nursed with assiduous care, were really destroyed beyond recovery. But the progress of the Summer has proved that the fatal teeth of the depredators penetrated deeper than usual towards the life wood of the tree.

But the injury last Winter was, in very many cases, different from anything experienced in former years. Thousands of trees were gnawed *below* the surface of the ground, while heretofore the bark has only been eaten off above ground. Last week we called upon a friend who is noted as a fruit grower. For a dozen years or more he has been preparing large orchards, stocking them with the best kinds of fruits. One year ago he had over *one hundred and thirty acres* of choice trees, most of them just at the right age to yield remunerative crops, and he had looked for the product as a source of income for the rest of his life, now somewhat advanced. Last Winter the *mice* ruined nearly the whole of this finest single collection of trees in the country. The loss, not only to the proprietor himself but to the community, is irreparable. At least fifteen years would be required to rear other orchards to the same condition, and this will not now be attempted—or not until some sure safeguard against another like destruction shall be discovered.

We have given an outline of one case, to us the more striking as it came under our own immediate observation. But there are thousands of other cases, individually less in importance than the above, but in the aggregate of very serious moment. We learn that the mice are now in the fields in great numbers, and that there is a prospect of extended ravages the coming Winter. The question now is,

What shall be done with the mice?

We have had remedies proposed by the dozen, but none of them will be effectual, because they refer only to the protection of the tree above ground, whereas much injury was done last Winter both to the main stock below the surface, and to the roots. We were recently asked to examine a couple of sickly looking trees to ascertain what was the matter with them. Observing mice holes at a little distance from the trunk, we dug away the earth around the roots, and found the tap root gnawed half away and entirely dead, while most of the side roots were also dead from the same cause. We doubt not that a large number of similar cases will be found elsewhere. Now tar, salt, lime, ashes, turpentine, assafœtida, &c., upon the trunk, removing the snow as fast as it falls, or packing it down solid, will none of them answer in such cases? Can any of our readers suggest anything that will? We solicit replies to this question at an early day, that, should any feasible plan be suggested, we may publish it in our next in time to be available the present season.

Why were the mice so destructive last Winter?

This has been accounted for by the fact that there was an unusually large body of snow around the trees during several months. But this will not account for the abundance of mice, as these animals cannot nest and breed in a snow-bank. So far as we can learn, in those localities where the

chief injury was done, the heavy snow of last Winter was not preceded by any rain, but it fell upon dry ground after the unusually long dry season in November and December. The soil was so warm and free from water, and was so thoroughly protected by dry snow, that the mice were able to burrow in it and breed during the entire Winter. It is well known that these animals multiply very rapidly, and quickly arrive at maturity when in good quarters. A single pair finding their way into a house, will in a few months completely overrun it. This will account for the immense numbers of them produced last Winter. For a time they found the usual sustenance in seeds, &c., in the soil, but owing to their great numbers, and the long continuance of the snow, they were driven to attack not only the roots of fruit trees but,also of shade trees, and shrubbery of various kinds. We have heard of whole hedges of the Osage orange, and also currant bushes, blackberry, raspberry and strawberry plants being destroyed. The mountain and prickly ash, beach, maple, elm and other shade trees, and even evergreens were also attacked.

Should the ground fill with water this Fall before freezing, the ordinary methods of protecting trees will doubtless suffice, but we need some method to resort to in a season like last year. Who will suggest an effectual one?

Trapping Mice.—The number of mice may be very materially reduced by trapping them. They are very readily caught. The little wooden traps, with a spring yoke rising over a round hole in the side, can be bought very cheaply. They are retailed for about three cents each when having but one hole, and for six cents with two holes. Two to three dollars will purchase a hundred of the single hole traps. These baited with a bit of cheese, or cheese-rind, and distributed around an orchard, will thin out the mice very rapidly. We have a lot of them about the dwelling, garden, &c., and find them more effectual, and less annoying, (especially o'nights,) than a gang of cats.

Shielding the Trunks.—A subscriber of Clermont, Columbia Co., N. Y., after speaking of the extensive ravages in his own neighborhood, where much fruit is grown, says: A neighbor of mine suggests buying roofing tin, and cut each sheet, lengthwise, into two pieces. Bend one of these pieces around the base of each tree. This will protect them eighteen inches above the ground. The tin cases can be bent larger or smaller to suit the size of the tree. The cost would only be about six dollars for two hundred trees, and the same tins would answer for a succession of years, as they could be taken up and housed each Spring.

Another old plan is to tie rags to small sticks and dip them in melted sulphur and set one up at the base of each tree. We doubt very much whether mice are afraid of sulphur in any shape.—[Ed.

Lost! Yesterday, somewhere about sun set, two golden hours, set with sixty diamond minutes. No reward is offered, for they are gone forever.

ICE-HOUSE—HOW TO BUILD A CHEAP ONE.

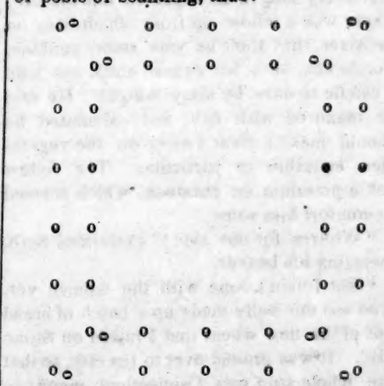
Several subscribers inquire how to construct a *cheap* ice-house. It is not difficult nor expensive to build one large enough to supply all the demands of any single family. A small room, in a shady location, with dry bottom and sides, filled in with powdered charcoal, or tan-bark, or saw-dust, is about all that is required.

Those having a large cellar may appropriate a part of it for an ice-room, if there be drainage at the bottom to carry off surplus water. Make a double bin, with at least a foot space between the boards forming the sides, and fill the space with tan-bark or saw-dust. Dry pounded charcoal is still better if it can be obtained. The cellar walls may form a part of the outside walls of the ice-room, but a considerable thickness of the non-conductors—tan-bark or saw-dust, must be put between the walls and ice. The doors to such a room should be double. Loose boards laid down upon timbers, and a coat of straw one foot in thickness, will suffice for the bottom. Pack in the ice closely, filling the chinks with snow or pounded ice, and put plenty of saw-dust around the sides, so that the whole shall be solid. Cover the top with a foot or more of saw-dust or straw, which will settle down as the ice melts or is removed. If care be taken to admit as little air as may be, and the room be ten to twelve feet square, it will keep well all Summer.

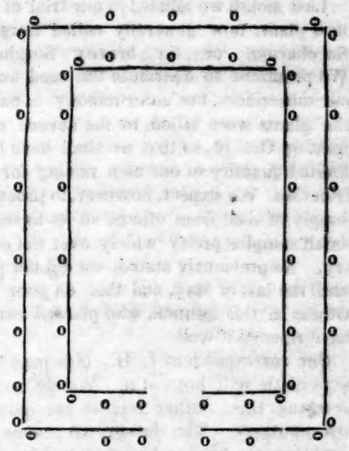
We have heard of an ice-house constructed nearly like the above, only that it was sunk down four feet below the cellar bottom, and five feet above. The top was a sort of double-decking, with a foot of tan-bark between the boards forming it. The top of this served as a large milk shelf. This arrangement may work well if a good drain beneath the whole carries off all water. Such an ice-room may be easily constructed in connection with a milk house, or on the north side of a bank or hill.

Usually, however, we should advise to erect an ice-house above ground, say on the north side of a building or of a hill, or where it will be shaded by trees as much as may be.

For the outside walls set up a double row of posts or scantling, thus:



These posts are to be of durable wood, with the inner sides hewed or sawed straight, to admit boards being nailed upon them. They must set firmly in the ground, and extend as high as may be needed. They may be set two or three feet apart in the row, the rows having a space of 15 to 20 inches between them. They are to be sawed off square at the top, all of an equal hight; then nail boards or planks on the inside of the two rows, thus:



Make a double door upon the side opening. Fill up the space between the boards with powdered charcoal, tan-bark or saw-dust, packing it in well.

Nail or spike a plate upon the top of each row of posts, and fasten the rows together by cross-pieces. Joists are also to be put across, to hold an upper floor, as well as to keep the sides from spreading.

A steep roof should be put up, the rafters extending over the eaves and sides of the building three or four feet, to shade the walls and carry the rain away from them.

For a floor, put down timbers of any kind, and lay on loose planks or boards, and cover a foot or more thick with straw. See that there is sufficient drainage under the floor to carry off all water running down.

As soon as solid clean ice, a foot more or less in thickness, can be obtained, saw it into square blocks as large as can be handled conveniently, and pack it into the room upon the straw as closely as may be, filling in all the chinks with snow or pounded ice. If in very cold weather, a little water thrown in will freeze and make the whole room solid. Be careful to have the space between the mass of ice and the wall well filled in with pounded ice, snow, straw or saw-dust.

When the whole is filled nearly to the joists, put upon top of the ice a quantity of saw-dust or straw, and lay down an upper floor, upon which also should be put another layer of saw-dust, tan-bark or straw, one foot or more deep. It is well also to have an air-hole through the upper floor and roof, with a covering to shed off rain.

The larger such a building is made, the better the ice will keep. A room twelve to fifteen feet square, and eight to twelve feet high, will be large enough for all the wants of a large family, or two or three small ones combined.

The above general outline is in part derived from observation, and in part from Allen's Rural Architecture, in which cuts and full

details are given. This work contains very many valuable hints in reference to all kinds of farm buildings. It is published by C. M. Saxton & Co. Price $1. We can procure a copy for any one desiring, and send it post-paid, for $1.—Ed.

MORE ABOUT THE CHINESE SUGAR CANE.

Last month we alluded to our trial of this new plant, now generally called Sorghum Saccharum, or for brevity Sorghum.* We promised to distribute the seed among our subscribers, but unfortunately a part of the plants were killed by the severe early frost on Oct. 16, so that we shall have but a limited quantity of our own raising for distribution. We expect, however, to procure a supply of seed from others, so as to scatter small samples pretty widely over the country. As previously stated, we did not plant until the last of May, and that on poor soil. Others in this latitude, who planted earlier, have ripened it well.

Our correspondent I. H., (see page 325,) says cattle will not eat it. We do not understand this. Other reports are quite to the contrary. The full-grown canes are doubtless too hard to be eaten well by cattle without cutting or grinding; but one characteristic of this plant is, that if cut down when three or four feet in hight it will send up a great number of new shoots. We still think it will prove highly valuable to sow thickly for fodder.

Will it be valuable for sugar?

On this point the experiments are not yet sufficiently numerous or definite. During the past month we have watched carefully for any new light. We now incline to the opinion that the Sorghum Saccharum will not only prove profitable for sugar-making, but that it will, in a measure, take the place of the sugar-cane itself. How far north it may be grown for this purpose is yet to be determined.

Mr. R. Peters, of Atlanta, Geo., has experimented largely the present season, and is so well convinced of its superiority to the old sugar-cane, that he intends to plant a large surface next season. One decided advantage is, that it can he raised from the seed in a period of less than five months, while double that time is required for the sugar-cane, which renders it very liable to be killed by the frost.

We do not learn that crystalized sugar has yet been produced, but an excellent syrup or molasses has been made, and a method of crystalizing it will doubtless soon be discovered. Mr. I. H. says the juice emitted an offensive odor when boiling. He should have added a small quantity of lime, which would not only have prevented this odor, but would also have increased the quantity of molasses. Before another Autumn we shall be able to give the most approved quantity of lime.

Everything considered, we advise a pretty general trial of the Sorghum next season. A small quantity of seed sown in a drill, or planted in hills, will require but little care or expense. There is no necessity for paying much for the seed. It is now pretty well scattered over the country. If we can get seed at any price, we shall send enough for trial, free of charge, to as many of our regular subscribers as desire it, on their forwarding a stamped envelope, redirected to themselves, so that we shall only have the trouble of putting in the seed, sealing, and sending to the Post-Office. Directions for cultivation will be published in one of the Spring numbers of the Agriculturist, in time for planting.—[Ed.

*The literal meaning of Sorghum Saccharum is *broom-corn sugar-cane*—the plant resembling broom-corn in appearance, and sugar-cane in the sweetness of its sap or juice. The words are pronounced sor-gum sak-ka-rum, both words being accented upon the first syllable.

TIM BUNKER IN TALL CLOVER.

THE FAIR, AND HOW HE TOOK THE PRIZES.

"Taking in your squashes then, this morning, Esq. Bunker," said Seth Twigs, as he looked over the garden fence, and saw Tim very busy. The smoke curled up from his pipe, and both hands were thrust into his waistcoat pockets, as he stood with his weight poised upon one leg, and both ears opened.

"O, it is you, is it Seth," said Tim, as he deposited the last squash in the basket. "Did you hear how I came off at the fair yesterday?"

"Not exactly. I kind 'o thought it wouldn't be strange if them carrots of you'rn got a premium."

"Carrots, man! why I made a clean sweep, and got a premium on everything I carried. Had the grandest time, I and my family, ever experienced. You ought to have been there Mr. Twigs, to see Hookertown in its glory. First, you see our town train was made up of seventy-one yoke of oxen, besides Jim Latham's steer train of five yoke, which the Committee said would not count. This was bigger than anything upon the ground, and took a prize. Then Deacon Smith's fat pair of cattle, that weighed five thousand pounds upon the hoof, could not be beat. He also had some South Down wethers that weighed near two hundred a piece, and were said to be the finest fat sheep ever exhibited in the State.

"But I was going to tell you how our folks come out. You see Mrs. Bunker's big squash, that grew there in the carrot bed, beat everything in the vegetable line for size. There was a fellow up from Shadtown, on the river, that tho't he was some punkins. But, la suz, Seth, his squash could not hold a candle to ours, by sixty weight. He said he manured with fish, and calculated he should make a clear sweep on the vegetables, squashes in particular. The fellow got a premium on potatoes, which seemed to comfort him some."

"Whurra for our side!" exclaimed Seth, swinging his beaver.

"But I hain't done with the women yet. You see our Sally made up a batch of bread out of the new wheat that I raised on Stone Hill. It was ground over to the city, so that the whole stuff was Connecticut manufacture, from top to bottom,—wheat, flour, yeast, and the girl that made it. And who'd 'a thought, Seth, that same loaf of bread took the premium."

"Didn't the gal blush when it was read off?" inquired Seth.

"I shouldn't wonder if she did; but whether it was about the bread, or one of the ministers that was on the Committee, I couldn't say. They do say that the young man they have just settled in Shadtown, is mighty fond of exchanging with our man, and that Sally's singing is very much to his mind. But that had nothing to do with the premium, for it never got round that the bread was made of Connecticut flour, until after the premiums were read off. Then, you see, I let the cat out of the bag, and told them that No. 5 was made out of our home-made flour by our Sally.

"John's onions, too, came out just as they were labeled, No. 1, and the boy has got the money for them in his pocket. His Bramen geese were the largest exhibited, and the white Dorkings could not be beat. You know our Suffolk pigs; I had them all washed up the day before the fair, and they were clean enough to go into the pork barrel all alive. They were the best lot exhibited.

"There was a good deal of competition on the vegetables. One man brought a hundred varieties, and another ninety-one. My carrots were hard run, and the Committee declared that they were a good deal bothered to know how to decide, and I guess they were so. But you see my star was in the heavens that day, and my carrots took the prize. That is what I call doing pretty well. But it isn't a circumstance to what I shall do next year. I'm bound to lay myself out at the next fair. I wish I couid get my American Agriculturist for the full year, right off, so as to have all the good hints it gives, before hand, to be thinking ov. But, howsumever, everything comes along about in its season, so I'll keep watch of the numbers which come the first of every month. I say, Seth, you must subscribe right off now. You needn't wait till January, for the Editor has some notion of his about having all subscribers end with each year, and he says all new subscribers who begin now will be charged nothing for the November and December numbers. That'll be so much clear gain. Why, I wouldn't take a dollar for them two numbers alone."

AGRICULTURAL SHOWS FOR 1857.

The Agricultural Shows and the "Agricultural" Horse-races are nearly over for the season. We are advised of only three yet to be held, viz.: the State Exhibition of Alabama, at Montgomery, Nov. 11th to 14th; of South Carolina, at Columbia, Nov. 11th to 15th; and of S. C. Institute, at Charleston, Nov. 17th to 22d.

American Herd-Book, Vol. III.—Those who have addressed inquiries to us, are informed that it is proposed to issue the 3d Volume, May 1st, 1857. All pedigrees to be entered must be sent in before Dec. 1st, 1856. A circular giving full particulars can be obtained by addressing the editor—Lewis F. Allen, at Black Rock, Erie Co., N. Y.

LIGHTNING RODS.

To the Editor of the American Agriculturist.

I send you three new subscribers, and wish I could send you more, for I think your paper indispensible in my small farming. I am satisfied it has made me $25. Will you tell us in your next, if No. 1 wire will do for lightning rods, and if not why?

Yours Truly,

WM. HENRY MAXWELL.

JONESBOROUGH, East Tenn., October 2, 1856.

The above is given as a specimen of hundreds of encouraging letters received quite recently. Many put the profit derived from the paper at a still higher figure.

We think No. 1 iron wire too small for a safe lightning rod. If of copper, it might do, but copper costs several times as much as iron, and it is therefore better to get iron of larger size. No. 1 wire is about five-sixteenths of an inch in diameter, or a little more than a quarter-inch. When a rod is well pointed and kept bright, it will usually draw off electricity from a cloud *gradually*, and generally one but half the size of No. 1, would suffice to conduct away the charge from a cloud. But a large, heavily charged cloud, moving rapidly, would be likely to furnish sufficient electricity to *melt* a small rod. We have several times melted a wire larger than a large knitting needle with the electricity from an electrical apparatus of our own construction. Not only is there danger that a small lightning rod will be melted, but, from its want of capacity to conduct to the earth all the electricity of a large cloud, a part of the charge is quite likely to diverge from it and enter some part of the building. We have heard of such instances, and also of a building being set on fire by the red-hot molten iron of a small rod.

We put up a rod upon our own dwelling in August last, which is constructed thus: A half-inch iron rod is made very pointed at the upper end, and plated with silver from the point downwards about eight inches. A single point only is used, which stands over the center of the house and reaches twelve feet above the highest point of the roof or chimneys. No chimney is distant more than 14 feet from its base. Three small "slanting" wooden braces, touch the rod about five feet above the roof and prevent it from blowing over. It is bent at the base in a gradual curve—not a short angle which would make it a poorer conductor—and it is then carried along the roof and over the corner with another long curve, and thence down into the moist earth. The end is finally carried into a cistern, and terminates in the water at the bottom. The reason for carrying it first into moist earth is to still have it in connection with the ground, if the cistern should chance to be dry. The supports on the roof and sides of the building are glass thimbles clasped in an iron staple somewhat like the letter P. The necks of common junk bottles will answer very well for the glass thimbles. They may be held in wooden supports as well as in iron staples.

A continous rod, with no joints from top to bottom, is much the best. If separate pieces are used they should be welded together, or at least well locked and twisted so as to furnish a good connection at the joints. Our own rod consists of several pieces which go together with screws. The connecting piece is an inch in diameter, three inches long, and hollow. The thread of the screw at either end is cut in different directions which permits joining the rods by simply turning the joining piece. This is a simple and perfect arrangement, and the rod can be taken down and put up in a few minutes.

Many or few Points.—For a very large building, several points furnish a greater protection than one single rod.

One side of a very compact cloud may pass near the corner of a building and discharge its electricity through it to the ground. In this case the single rod in the center of the building would be too distant to draw of the charge. In almost all cases, however, some part of the cloud will pass over a central rod. After considerable investigation of this subject we think the plan we have adopted the cheapest, and sufficiently safe for any building of ordinary dimensions. The main thing is to carry it sufficiently high. The rule generally laid down is, that the horizontal distance from the rod to any point to be protected should not be greater than twice the hight of rod above that point. Thus: if a rod be erected 20 feet from the top of a chimney it should extend ten feet higher than the chimney. While about it, it is quite as well to make the proportional hight somewhat greater than this.—ED.

STONE WALLS—TO PREVENT THEIR FALLING IN WINTER.

A correspondent asks, "How shall we keep our stone walls from being thrown down by frost the coming winter?" If properly built at first, there would be no danger of their falling; rather, we should say if properly *placed* they would not fall. They are displaced by the action of frost, not upon the walls nor upon the soil itself, but upon the water saturating the soil. All solid bodies contract more or less in cold weather, but in a stone wall or in *dry* earth, the contraction or change of bulk is not sufficient to displace even a loosely built wall. Water, on the contrary, expands largely in freezing. Eight barrels of water will yield nine barrels full of ice. Take a barrel three feet high, put into it 32 inches in depth of water, then allow it to freeze and the barrel will be just full. Precisely the same result would be obtained if 32 inches of a mixture of soil and water had been used instead of water only. But put in dry earth and the expansion or increase of bulk will scarcely be perceptible.

Just so the soil under a wall, when saturated with water, will expand an eighth of its bulk in freezing, and raise the wall by so much. If now one side thaws before or faster than the other, that side of the wall will settle down more rapidly, and the chances are that the whole will be displaced and perhaps tumbled down.

The remedy is simple. Run a drain or ditch near the wall, deep enough to render the soil under it dry to as great a depth as the frost will penetrate, and unless very carelessly built, there will be no danger of the stones tumbling down.

It is better to erect a stone fence upon a ridge of dry land at first, than to dig a foundation in a wet surface. If the latter course is pursued, the damp earth upon either side will expand and contract unequally, and throw down the best constructed stone wall.

The same is the case with posts set in a wet soil. Freezing elevates the frozen earth, and as this is solid around the post it will raise it out of the unfrozen soil below, but it will not usually settle back again when thawing takes place. A few successive freezings and thawings will ultimately raise the posts entirely above the surface, when they will fall over. This can only be remedied by draining off the water.

In the erection of foundation walls for buildings in wet ground, it has been recommended to build open spaces in them and set in perpendicular blocks of wood upon which the sills may rest, and to fill in around these with tan bark, gravel or coarse sand. This plan will answer a good purpose if the filling around the supporting blocks be kept *dry*, and not otherwise.—ED.

AN EXPERIMENT WITH A SALT MARSH.

CAPITAL WELL INVESTED—A GOOD EXAMPLE.

The communication of our correspondent 'Inquirer,' in our last issue, opens a subject of great importance to our shore farmers. There are thousands of acres all along the coast, from Maine to Florida, bearing now nothing but poor salt hay that hardly pays for cutting, that might be brought into beautiful upland meadows, at a very small expense. Almost every small creek or brook, emptying into the sea, is bordered by extensive marshes near its mouth, that only wait for a little skill and capital to make them largely productive. These marshes, vary in extent from a few acres to several thousand, and in quality from a quagmire yielding only coarse flags, to a close smooth turf, yielding black marsh hay. They are for the most part perfectly level, and free from stones, and already so hard as to admit of driving a loaded team over them, in the summer. They are the kind of land adapted to the mowing machine, and in all efforts at reclaiming them, it should be kept in mind, that they are to be mowed by horse-power.

We have just visited one of these meadows, reclaimed two years since, and which already has paid the whole expense of its improvement. Though the experiment has not been long enough to determine the practicability of raising grain crops, and other matters of interest, still it demonstrates the economy of shutting off the sea water. Following the order of our correspondents enquiries, we will give a brief outline of our friend's experiment.

LOCATION.

The meadow consists of thirty acres, and lies upon both sides of a little creek, emptying into one of our large navigable rivers, some five miles from its mouth. This creek breaks through a high ridge just before it

enters into the large river, making a narrow ravine, very convenient for an embankment at small expense.

ORIGINAL CONDITION.

Before the improvements, the tide flowed twice a day into the creek, and at all high tides, the meadow was flooded. Of course only the flags and coarse grasses that love salt could flourish. A large part of the meadow was annually mowed, though only a small part of it was solid enough to admit of carting off the hay with a team. The creek flowed through, directing its current to every point of the compass, and wasting a great deal of land in its windings and quagmires. The difficulty of cutting and carting the hay, and its poor quality made it almost profitless to the owner. He was glad to sell it at twenty dollars an acre, and, considering that it never paid him the interest on ten, it was probably the best bargain he ever made, when he sold it.

THE EMBANKMENT

is made in the most thorough manner. It consists of double walls some twelve feet apart, and filled in with earth. On the inside of the embankment runs a row of plank, driven deep into the mud, and fastened, so that no water can get through, except at the culvert. As the embankment was but a few rods in length, it was not a very expensive job. We think it is always wise to do this part of the work in the most thorough manner, as the whole improvement will be worthless unless the sea water is effectually shut out. Stone upon the outside, and plank upon the inside will make the tank safe against water and muskrats, the original proprietors of salt marshes.

CULVERT AND TIDE GATE.

The culvert is made of heavy plank, running the whole width of the dam, and about six feet wide. It is made perfectly tight, so that all the water is compelled to flow through it. At each end of the culvert, is a strong bulk-head, and at the bottom a tide-gate the whole width of the flume. The gates are some two feet high, and hung upon strong iron hinges. The current of the creek pushes them open, and the current of the tide shuts them, so that no salt water can flow in, or at least not enough to do any damage. While the tide is up, of course there can be no flowing out of fresh water, and all that runs in the stream accumulates in the ditches. In case of heavy rains, in the winter and spring, this will sometimes lead to an over flow, but in summer while the grass is growing the ditches will hold all the back water, and even in case of overflow the fresh water, lying upon the meadow an hour or two, would not damage the grass. But this will rarely happen, if the gates are made large enough.

DITCHING.

Our friend has straightened the creek in many places, and filled up the old channel. Besides this he has put in many side ditches and made the whole meadow so solid that a cart can be driven all over it. His idea was originally to put the whole into cranberries, but his unexpected success in raising hay will perhaps divert him from the cranberries. If the meadow remains permanently in grass, we think he has already more ditches than he needs. A ditch around the outside, and a main ditch through the middle in ordinary cases, will be enough to carry off the water. The small ditches are very much in the way of a mowing machine. If the object is to bring the meadow under the plow, and to raise root crops or grain, more ditching will be necessary. The drains should be as low as the bottom of the tide gate. If deeper than this, the banks will be more liable to crumble, and they will be kept clean with more difficulty.

BREAKING UP THE TURF.

He has not broken up much. A small piece of buckwheat looked well for a time, but there came a freshet in the large river, which of course made back water in the creek, and the overflow spoiled the buckwheat.

It will be seen in a communication elsewhere, from "EXPERIENCE," that he does not recommend plowing at all. If two or more tons of good English hay can be procured without it, it is unquestionably better to sow grass seed directly upon the sod.

SOWING GRASS SEED.

This is done with success upon upland at certain seasons of the year, and doubtless will succeed upon reclaimed marsh. This has not been done upon this meadow, for the character of the grass is changing without it. The flags have already vanished with the mire, and much of the three corned grass, which so abounds in these marshes, is giving place to more nutritious grasses. A kind of blue-top is coming in, in great abundance. It may be that the seed has been brought down from the upland meadows above, through which the stream runs, and was distributed over the marsh when it was over flowed. It will be safe for all experimenters to sow clover, herds grass, and red top. If they run a light horse harrow over it much of the seed will catch, and do well.

RESULTS.

Though no seed has been sown upon this meadow, the result has been highly satisfactory. He has cut about two tons to the acre upon this meadow, and the quality of the hay is excellent. It is eaten with great relish by all kinds of neat stock, and judging from the looks of the cattle, it is not deficient in nutriment. Our friend thinks it worth twelve dollars a ton.

His account with the marsh stands about thus:

Cost of 30 acres at $20 per acre	$ 600
Improvements	900
Making the capital invested	1500

His crop of hay for this season is about sixty tons, which at 12 dollars, is worth the snug little sum of | $720
Deduct $3 per ton for harvesting | 180
It leaves | $540

as his annual interest upon a capital of $1,500. This is over thirty per cent interest. We see no good reason why it should not continue to be as productive for many years to come.

Now we wish to hold this up as a worthy example for those farmers to imitate, who are investing their capital in bank stock or in manufactures that pay only six or seven per cent. A farmer needs capital quite as much as any other business man, and he can only invest in other enterprises profitably, when he has all the capital that he needs to get maximum products from his fields. As a general rule, a competent business man will take better care of his capital than another can for him. A farmer who means to live, and accumulate, will be much more likely to do it in his business, than to invest his earnings elsewhere. What immense sums are every year lost to this calling, because farmers will speculate in bonds and stocks. Let the farmer stick to his plow, and hope to thrive only by it. If he has a swamp that needs draining, let him drain it. If he has a salt marsh that lies conveniently for diking, let him use his capital in building dikes and flood gates. If the work is thoroughly done, the money will be certain to come back again with a better interest, and with more security for the capital than any bank can give.

Our friend is a large farmer, and takes a lively interest in neat stock, horses, pigs, and poultry. He drains and subsoils, cleans out the rocks, and builds heavy walls, but no part of his operations gives so entire satisfaction as the reclaimed salt marsh. This is his pet achievement, and all his neighbors consider it a triumph. "INQUIRER" may safely go ahead with his undertaking, and if he attempts plowing, let it be only on a small scale. Grass is the great crop for reclaimed marshes.—ED.

RECLAIMING SALT MARSHES.

ANSWERS TO ENQUIRIES IN OCTOBER NUMBER.

[The following answers are from a highly intelligent, practical man, who has had not a little experience with salt marshes. He has taken considerable interest in the subject and twenty years ago, when on the committee for revising the Statutes of Massachusetts, he was careful to introduce into the chapter on reclaiming swamps, a section on *Salt Marshes*. This law is still in force, though seldom *en*forced. By it, when swamps or marsh lands are owned in common, the majority can compel the minority to join in the work of reclamation, or submit to be taxed for the purpose by the county commissioners. As "EXPERIENCE" has a number of acres recovered from the inroads of the sea, we trust he will give a minute description of its former condition, exact method of constructing dams, gates, &c. A "word picture" of his plan would be interesting.—ED.

To the Editor of the American Agriculturist.

I give an off-hand answer to Inquirer. I only wonder there are not more *enquirers* on this subject. My name is not essential to the article and you will please leave that out, as I do not seek notoriety.

"*The Embankment.*"—If your marsh is exposed to the sea, build a wall on the outside, and bank it within—(mine is wide enough

for a cart path.) If there be no great pressure from tide, a bank and ditch may be sufficient. The ditch will furnish material, and cut sods from the marsh, built like mason work, will hold it together. Sloping on each side may be sufficient. I tried this twice and the tides washed it away. I then built of stone.

"*Culvert and Tide Gate.*"—Let a millwright build it well, so as to let the water run out, by forcing the gate open—and the tide returning, to keep the gate shut by pressure. Size depends upon the quantity of water to be discharged.

"*The Ditches.*"—Dig no more ditches than will drain the water into the brook (if one) or the main ditch. Leave these till you find how much water stands on the meadow. Remember you will cut the grass *by a machine*, and all interruptions must be avoided.

"*Breaking up.*"—Never plow it at all. If plowed at first the sod will be many years in rotting. (I tried this and caused myself much expense in levelling again with dirt.)

"*Upland Grasses &c.*"—The dyked marsh will double the quantity of salt hay, the first year. Keep sowing seed, as soon as the weeds begin to grow, and time will cover the whole. Nothing will grow but grass, worth having, for you must not plow for years if ever.

"*Results, &c.*"—I have cultivated—or rather taken a crop of two or more tons per acre of best English hay from my marsh, for years, and the pasture holds out late. I know not much of fresh water swamps, but my experience on salt marsh is entirely satisfactory. It is sorrowfully true that very little is written on this subject. Yet there are enough worthless salt marshes on our sea-board to feed thousands of cattle, that may be reclaimed at very small expense.

Even while the marsh remains salt, the double supply of *ameliorated* hay will well repay the labor in many places, and by degrees and constant sowing, the best grasses will gradually root out the old covering.

I had my marsh turfed the first year one to two inches deep, by a knife made for the purpose. This was heaped up and dried, then burned. A small spot sown with clover where the ashes were spread, produced a fabulous crop. The alkali corrected the sourness of the land; and as the clipping was all fibre, the ashes were abundant. This cost about $25 per acre, by the job. It may be too much expense, but it worked well. I now occasionally manure the land as I would other land, and consider it the cheapest meadow I have. I prefer stable manure, yet I have used guano with success. EXPERIENCE.

In Prussia, for every time a child is absent from the public schools without a reasonable excuse, the parents are fined half a dollar. This law, after a number of years experience, is found to have the most beneficial effect.

A GOOD PLACE FOR CATTLE.—"It is said" that the cattle live so long out in Iowa that they have to put sticks on the end of their horns for the rings to run out on!

HINTS ON WINTERING BEES.

To the Editor of the American Agriculturist:

In response to your request, I will offer a few suggestions on keeping bees during Winter, without stopping to give all the reasons for the positions assumed.

To ensure success, the first thing to be attended to is, to see that you begin the Winter with none but *good* stocks. It will not do to consider a stock good because it has thrown off swarms, stored surplus honey, &c.; but it is important to know its condition *now*. This must be learned by close inspection. Turn the hive over on a cool morning, so carefully as not to arouse the bees. Should they chance to be disturbed they may be quieted by tobacco smoke blown among them. The best stocks will show bees between nearly all the combs, unless the number of combs exceeds a dozen. Where they are found only between three or four combs, the most favorable circumstances will be required to get them through the Winter. Without superior accommodations such should be taken up, and thus save further trouble and vexation.

The brood combs of old stocks should also be examined, to see that they contain no foul or diseased brood. Such old stocks, when healthy, are just as good as young swarms, and will stand the cold even better.

As soon as the sunny days of Autumn are past, so that there is no danger of the bees being tempted out, the hives intended for Winter should be moved to their quarters, unless they already stand in a suitable place.

When but few are kept, it is generally advisable to winter in the open air. Choose a warm place in the sun, yes, in the sun, where it can strike the hive an hour or two each day.

Many people are alarmed at seeing a few bees lying dead upon the snow during Winter, and there is a prevalent idea that they get "snow-blind," and fall down to perish. This is an error, for a close examination will show that just as many perish upon the bare ground, only that they are not so readily seen as when on snow. I have frequently taken them out from their winter quarters in the house, when the snow covered the ground, in many places two feet in depth, and yet lost a less number than at many other times when the ground was bare.

A light snow, newly fallen, is somewhat fatal, should the next day or two be still and pleasant to tempt them out. If they settle on such snow, it will not support their weight,—they sink below reach of the sun, get chilled and perish. A hard crust or melting snow is "terra firma" to a bee. In case of a light snow put up a board to shade the hive, and should the air be sufficiently mild for them to leave when thus shaded, it will generally do to remove the board and allow them to fly—the majority will return. The entrance should be secured against mice, and yet allow sufficient ventilation, a greater amount of which is required than is usually supposed. Small pieces or strips of wire cloth, partially covering the entrance, are just the things. These should be fastened with carpet tacks in such a manner that the bees may pass, and still the mice not be admitted.

To get rid of the vapor that is continually passing off from the bees, which often moulds the combs and spoils the honey, make half-a-dozen or more inch holes through the top, and cover with an empty box, in such a way as to keep out rain, snow and mice.

When fully ventilated and secured from the mice, they may be covered two feet with snow and no harm will be done. A little snow only around the bottom, is not so well.

Where fifty or more stocks are kept, I would recommend a small, dark, warm room, or dry cellar. A much less number will not be likely to keep the temperature sufficiently high. Very little air admitted is sufficient. To get rid of the moisture, the hives should be turned bottom upward upon shelves, with little blocks under to raise them an inch from the shelf—the holes in the top being left open to allow free circulation of air. By having several tiers of shelves, one above another, a great many may be packed in one room; I have frequently put in two hundred on three tiers of shelves, in a room twelve by eighteen feet. That number will keep such a room above the freezing point at most times. But if the room cannot be kept uniformly warm by the number of stocks, or by other means, I prefer leaving bees out of doors, though housing is preferable with a large number.

M. QUINBY.

ST. JOHNSVILLE, N. Y., Oct. 1856.

FARMING IN HALLOWELL, MAINE.

JAVA WHEAT—THE APPLE CROP, ETC.

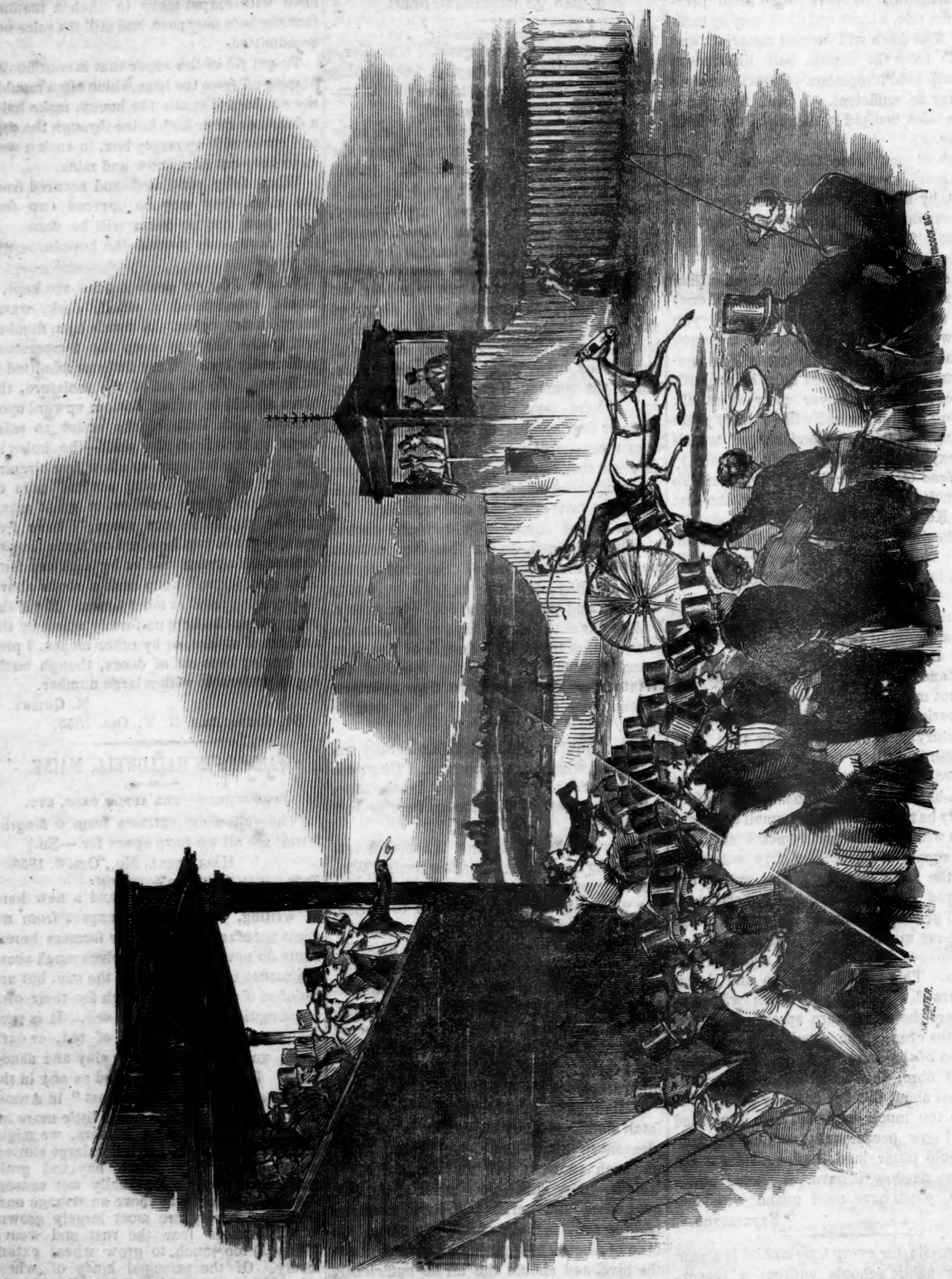
[The following extracts from a lengthy letter, are all we have space for.—ED.]

HALLOWELL, Me., Oct. 8, 1856.

To the Editor of the American Agriculturist:

* * * Being young, and a new hand at writing, you will not expect from me great accuracy. * * The farmers hereabouts do not trouble themselves much about the nature or necessities of the soil, but are satisfied if they raise enough for their own consumption, and a little to sell. It is generally rocky, with a soil of red, or dark loam, and some fields of clay and sandy loam. But our soil is as good as any in the State, (except way "down east" in Aroostook County,) and had we a little more interest awakened among farmers, we might raise as great crops, and tell as large stories, as anybody. * * Much hay and grain was spoiled by the unusually wet season, but still the yield was above an average one. Oats and barley are most largely grown. * * Farmers fear the rust and weavil (Midge!) too much, to grow wheat extensively. Of the principal kinds of wheat grown here, the red-beard, the Canada, the Illinois, and the Java or Egyptian, the last named has done the best. Mr. Moses Taber, of Vassalboro, harvested 28 bushels of it to the acre. Others have raised 15 bushels to one of seed, and others less. * * The apple crop is the most profitable one here. We have a medium yield, and as they are scarce in many places, we are getting $2 25 to $2 50 per barrel. * *

W. P. A.



An "Orthodox" Agricultural Exhibition in 1857.

SPAIN VS. THE UNITED STATES.

Spain.—It is said that the people of Spain have at last attempted a reform in agriculture, and that instead of their old races and bull fights, they have had a cattle show, which is to be triennial. A prize was awarded to an improved English Durham Bull. With great capabilities, Spain has remained in the rear in the march of improvement, but symptoms of her awakening are becoming apparent in railroads and manufactories, and at last in the substitution of the cattle show for the bull fight.

United States.—In this country we are also undergoing a change. Our agricultural exhibitions, which have been for a long time so useful, so honorable, and so popular, are fast being transformed into annual horse-races. If this state of things continue, we may next look for the introduction of annual bull fights. This will keep up the equilibrium—as Spain goes up we go down.

[Ed.

Highly Important AGRICULTURAL Intelligence By Magnetic Telegraph.

SPECIAL DISPATCH TO THE American Agriculturist.

INTERESTING (?) TO ALL FARMERS AND AGRICULTURISTS.

BOSTON, MASS., Friday Evening, Oct. 24, 1856.

The Agricultural (?) Exhibition is going on finely. The best races in the country on hand. Side scenes specially interesting.

At 3 o'clock a grand trial between Ethan Allen and Hiram Drew, to wagons, took place, best three in five. Ethan Allen won the premium of $1,000, making the first heat in 2:46½, and the second in 2:32½. Hiram Drew behaved badly in both heats, breaking frequently, and was withdrawn after the second heat. Ethan Allen was then put round the course on time, and came in in 2:35.

A TRIAL OF THE SORGHUM.

To the Editor of the American Agriculturist.

I have just read the hints to the farmers about sending their experience to the Agriculturist, and suiting the action to the word, I proceed to give my experience in the cultivation of Chinese Sugar cane. I sowed half an ounce of seed last spring, and gave it a good chance to grow and do its best. My object in trying the experiment was to raise it for green fodder for cows, but they invariably refuse to eat more than the leaves, although I have tried them at different stages of its growth for months past.

About a week ago we pressed out 50 canes and obtained about a pailful of juice. From this we obtained more than half a gallon of thick syrup of a sweet but not very pleasant taste. While boiling it emitted a very offensive odor, not unlike the rancid oily smell we sometimes observe in woolen manufactures. The outside covering of the stalk is too much like the cane or bamboo, for cattle to relish it much. It grows about twelve feet in hight, and when cut early it sprouts again like the cane of the south. I would like to hear the experience of others. My opinion is that there is not sugar enough contained in the juice to pay for the labor and fuel in boiling it. I. H.

NORTH HEMPSTEAD, L. I., October 5, 1856.

WINTERING SHEEP.

With proper management, sheep are quite profitable stock to keep on a farm. In the summer season they feed where other stock would hardly live. On a summer fallow, they are decidedly an advantage to the farmer, by keeping the weeds and grass down, and thus putting to use what would otherwise be worthless. Sheep, however, should not be kept poor, for it is a fact known to every one that a small flock, well kept, is more profitable than a large flock poorly kept.

Wheat straw is excellent feed for sheep if it is cut early and properly cured. It should be foddered out regularly and enough, so that they can pick out the heads and such parts as they like, without being forced to eat the coarse straw. It is a good plan to sprinkle strong brine on the straw once or more each week; the sheep will eat it more readily. Bean straw, pea straw and buckwheat straw are first rate; if not threshed quite clean, all the better. They will eat most kinds of weeds, when cured with hay, and will be picked out in preference. Without much labor farmers could gather a good deal of feed for sheep in the course of the summer season, by cutting weeds and curing them for hay. Good clover is without doubt the best feed for sheep, it comes nearest to grass of any kind of fodder, and sheep should be fed with it, in the spring when they need the best, especially ewes with lambs; and it is also necessary to shelter them from cold storms.

EDITOR'S FARM NOTES.

OR GLEANINGS AMONG PRACTICAL MEN.

Hon. Jas. A. Bill's Farm at Lyme, Ct.—Farm Buildings—Ice Houses—Fences—Under-draining,—Planting Corn late, &c.

Every one who has sailed up the Connecticut River, has noticed the high rocky banks near the mouth along the east shore, and the picturesque country that lies beyond. It was among these rounded hills, strown with boulders, or bare in spots with the outcropping granite ledge, that our business as chairman of a committee to examine farms in New-London County, Ct., led us. North Lyme, is a good sample of a Conecticut agricultural parish. Its soil is of that rugged granitic character which requires frequent stirring, deep plowing, and draining to make it highly productive; methods which the fathers did not believe in, and which the sons are only beginning to learn. Of course such farms under the old regime did not yield a very bountiful support to those who wrought them, and the sons were forced into other callings as fast as they grew up. The parish has probably added nothing to its population for forty years, and perhaps has decreased in population, wealth, and influence. While the young men of the south parish have taken to the sea, and become celebrated in the commerce of the country as merchants, and captains, the young men of the north part of the town have taken to book agencies, and become well known as publishers. This has been a profitable business as they have followed it, and some have gained a competence in its pursuit. Mr. Bill, has been engaged in this business for some twenty years; and, yet a young man, has returned to the hill on which he was born, to cultivate its soil, to make its rough places smooth, its wet places dry, to drain its marshes, and to illustrate in his practice the economy of a generous outlay of capital upon farm improvements.

The farm upon which he has established himself is upon "Bill Hill," and lies adjacent to the old homestead, on which his father still lives. It consists of about 150 acres, which he purchased some seven years ago. This farm previous to its purchase had been rented for some thirty years, and of course was badly run down. The fences were in a dilapidated condition and fringed with briars and brush. The pastures were grown over with bushes, and the swamps filled with alders, and coarse weeds. The buildings were decayed, and every thing was in about as bad condition as it could be. So miserable were the returns from this farm while in this condition, that it rented for but fifty dollars, which shows that the capital brought but a trifle over three per cent under the old system of skinning the soil.*

FARM BUILDINGS.

New buildings were to be put up immediately as the basis of other improvements. The soil is naturally moist and springy, and in digging the cellar of the house it was necessary to cement the sides and bottom, in order to keep the water out. The cementing was done in the most thorough manner, and repeated several times, but without stopping the water. There was no remedy for this evil, until a drain was dug through the rock, to lead off the surplus water. Mr. Bill has come to the conclusion, that however valuable cement may be to keep water within a stone wall, it is not available to keep water out of such a wall. This experiment is worthy of notice by those who are building a cellar in springy soil. A dry cellar can only be had by drainage. The buildings lie upon the four sides of a square, the house in front, the ell and ice-house upon the right, the horse barn and carriage house upon the rear, the crib, stye, and barn upon the left. These, with two or three field barns for sheep and young cattle, constitute the buildings, and are kept insured for six thousand dollars. They cost much more. They are convenient, substantial, and are built much more for use than for show. The corn crib and swill-making apparatus, are over the piggery, and arranged so as to give the feed immediately from the swill room. This saves a great deal of time and labor in the course of a year. It would be interesting for those who have their pig styes forty rods from the swill room to estimate the amount of travel it takes to feed swine three times each day, for a year. In the old style of husbandry time and labor were the last articles a farmer thought of saving. They were always on hand and cheap. The barn of course has a cellar, the whole size of the building, and only needs sheds upon the walls of the yard to make it complete for saving the manure. As it is, there must be some loss of ammonia from the sun and rains. We were glad to find

* THE GEOLOGY of this region may be interesting to some. The farm is nearly a mile from the river, and lies near the dividing line of two varieties of rock. The rock of the whole town belongs to the Eastern Primary formation. It is classified as granitic gneiss by Percival, and has several subdivisions. The rock of the South-east part of this Hill which we more particular examined is characterised by a predominance of reddish felspar. It includes not unfrequently, paralell beds of a fine grained, uniform red felspatic rock, with little appearance of paralellism in its structure, and also beds or veins of a coarse red felspar granite. Immediately west of this range and extending to the river is another in which the rock is dark mica seamed. Sub-granitic gneiss, occasionally sub-hornblendic. Beds of coarse white granite are frequently found and sometimes these have a distinctly porphyritic structure. The quality of the rock in both divisions indicates a good supply of potash in the soil. The whole region is deficient in lime; and this, in the shape of burnt oyster shells from Fair Haven, is probably one of the cheapest mineral amendments this farm admits of. The soil is of that character which will be immediately benefitted by deep and thorough tillage.

AN ICE HOUSE

among the buildings. Not one farmer in a hundred has this cheap comfort. It is so easily constructed, and so readily filled, and saves so many items in the course of a summer, that it is strange that so many farmers live without one. The important things to be secured in the construction of an ice house, are good drainage at the bottom, so that water shall not accumulate there; ventilation at the top to carry off heated air; and a perfect non conducting medium at the sides. It matters little what wall holds this medium. Stone, brick, coarse slabs, or smooth boards. A cube of twelve feet square will be ice enough for a family. Tan bark, saw-dust, charcoal are all good to stuff the walls with.

Ice water is so pleasant and healthful a beverage in summer, that no family having once enjoyed it will ever consent to go without it. The opinion which prevails in some parts, that it is prejudicial to health is without foundation. It is probably owing to some isolated cases of injury in consequence of an abuse of the article. It is almost as universal in the large cities as water itself, and no class of men better appreciate a glass of ice water than the guardians of the public health.

An ice box in the cellar, or at the door saves in meats, and in perishable fruits and vegetables, every season much more than the ice costs. Let every thrifty farmer build an ice house this fall, and fill it next winter.

FENCES.

These were models for all farmers, who have stony farms and plenty of capital. They are made of stone dug from the soil, and answer the double purpose of inclosing lots, and of making a market for the superabundant rock. Some of them are six feet thick, handsomely faced, and look like the foundation work of a fortification. The repairs have been very thorough on most parts of the farm, and more expensive walls have been built than we should recommend to farmers with small means. One two acre lot has been cleared and fenced at an expense of some $800, and even with this large outlay it pays a much better interest than when the whole farm was rented for fifty. The walls by the high-way, though not all so expensive as this, are well made and attractive in their appearance. In the back lots, the old walls have been re-set and in some cases removed, making the fields larger, which we regard as a very desirable improvement upon most farms.

UNDERDRAINING.

In the two acre lot, which we have noticed, Mr. Bill pointed out an under-drain nearly its entire length. The middle of the lot was formerly a swale, wet most of the time, and in the winter and spring, miry. The drain was dug five feet deep, and at the bottom a channel about a foot in width and the same in depth, was constructed of stone. The top was formed of flat stones, the interstices filled with cobbles, and then larger stones on top to the depth of two or three feet, and the drain filled in with surface earth. The drain empties at the lower part of the lot, and furnishes a living spring of excellent water, available at all seasons. The drain has completely changed the character of the lot. It is now always dry enough and yields abundant crops instead of stinted sour grasses. It produces the largest growth of corn, oats and hay immediately over the drain. The lot cuts now when in grass about eight loads of hay of the best quality, against one when it lay unimproved, in other words eight blades of grass grow for one.

This experiment has been so successful, that other similar improvements are projected upon the farm, and all the low wet places in the tilled land are bound to be drained.

STOCK.

This consists of 8 cows, 5 yoke of oxen, 15 head of young cattle, and about two hundred sheep. Hens are the only poultry allowed upon the place—the neighbors living too near each other to admit of keeping geese, turkeys, and ducks. The cattle are mostly grades, but embrace some fine animals. There were four calves, grade Devons, very handsome. Mr. Bill finds it profitable to raise his calves, both for his own farm, and to make beeves for sale to the butcher. In the interior of the country, young cattle are purchased mostly at Brighton, and after spending a few months upon the farm to fatten are resold for beef. He has South Down blood in his flock of sheep, and disposes of a large quantity of wool and mutton.

CROPS.

He has about nine acres in Indian corn of the large yellow dent variety. He plants about four feet each way, plows deep, manures heavy, cultivates thoroughly, keeps a flat hill, and gets great crops. There was one peculiarity in his corn planting, which confirms our own opinions and practice. He plants late, about the first week in June.

The advantages of this are a better setting of the young plants, less second planting, and less trouble in cultivation. The ground is then thoroughly warm, and the plants push along without any check, and mature as early as corn planted the first week in May. He thinks it saves the labor of once hoeing. From our own experience, and observation, we are persuaded it is idle to plant corn early in May, in latitudes north of this city.

Potatoes were formerly raised very largely for market in this vicinity, but they became so uncertain that the farmer only seeks to supply himself with this esculent. Mr. Bill has but an acre and a half. Oats, grass and rye are the other leading crops.

On the whole we were greatly pleased with our visit. It shows what a rough New England farm may become under the hand of skillful cultivation. Such bright spots are multiplying all through the East. The good time so long prophesied, if it have not already come, is surely coming.—Ed.

Success is the great absolution of snobs. Critics are the brokers of the literary exchange.—Punch.

FROM OUR WATERLOO CORRESPONDENT.

Fall Treatment of Manures—Husking Corn—N. Y. State Agricultural College—Agricultural Exhibitions.

Waterloo, N. Y., Oct., 1856.

Manures.—Most farmers in Western New-York apply their stable manure to their corn ground in the Spring, by hauling it directly from the yard to the field, where it is immediately plowed in; thus all the ammonia, as fast as generated, is saved in the soil. But that masterly farmer of Seneca County, John Johnson, says that the Fall is the right time to haul out and spread manure on the grass field intended to be broken up in the Spring for a crop of corn. He asserts that manure spread after September, in the Fall, loses none of its organic matter, and that it induces a late and early growth of grass through the scattered manure to be plowed under, which is an additional amendment to the corn crop.

Mr. J. is undoubtedly correct, if the manure can be kept through the Summer by compression, or composting, so as to avoid a too rapid fermentation; but if stable manure is kept exposed in heaps in the ordinary way, it will heat and lose by combustion, during Summer, most of its organic matter, all of which is saved if the winter made manure is plowed into the soil the same Spring, instead of the succeeding one. Hence, I take it, Mr. Johnson's plan will be followed by those Eastern farmers who make the most of their animal manures by composting them with peat, muck, &c., by which process a slow combustion only takes place, and nearly all the ammonia is retained in the heap; and if spread on the field in the Fall it will be found a great renovator of the grass, as well as the most economical manure for a Summer crop of grain when plowed under in the Spring.

Husking Corn.—Some of our best Pennsylvania German farmers cut up and shock their corn early, and haul it into their capacious barns as soon after fall seeding is over as possible; thus saving the fodder from the Fall rains. Here they husk it every leisure opportunity, improving the rainy days. The stalks are thrown on the haymow, or fed out in early Winter, when even the butts are sweet and juicy. Corn stalks thus appropriated are worth double the bleached things that remain uncut until nipped by the first white frost, and are exposed to late fall rains in the shock.

The N. Y. State Agr. College.—The buildings for this College will soon be in progress of erection. Six hundred and seventy acres of heavy tenacious soil, all fit for the plow, must make a large experimental farm, particularly when cereal and leguminous culture is the desideratum to teach the practical part of vegetable physiology in its relation to the soil and its constituents. But I suppose that cattle, horses, as well as sheep, of the various breeds, are to be multiplied and improved there.

I could have joined the Cayugans in preferring a smaller farm on that matchless section of the earth's surface near Sheldrake Point. It is only in this vicinity, on the

Cayuga shore, that the stalwart tulip tree (L'Tulipifera), the tall maple and ponderous basswood (Tilia Americana), alternate with the sturdy oak, denoting a soil as friable as it is all-abounding and wealthy in the food of plants, to a depth which no subsoil plow, yet to be invented, can ever hope to reach. The site, too, is picturesque, with a narrow, though more extended view of lake and shore, and rising grounds, and of arable field, orchards, farm-houses and woodlands, in far and near perspective. But the present location embraces an extensive landscape of woods and farm improvements, and the broad surface of the misty lake beyond; and the strong, stubborn soil lacks little more than mechanical aid to make it teem with vegetation.

Agricultural Exhibitions.—As far as heard from, the rural Fairs of every State and County are a great improvement on all preceding—the State Fair of New-Jersey, perhaps, excepted.

It would seem that a Jersey farmer improves by transplanting into a richer and more generous, if not a more grateful soil; as some of the best farmers of little Seneca County are from that State, and many of these have minds so far imbued with the importance of *book farming*, that they are among the first, and largest, on the subscription lists of our State Agricultural College. Our truly astute friend, Harris, of the Genesee Farmer, had his English propriety a little shocked at the Jersey Fair, when he saw only one poor Devon Bull in the large stalls appropriated for Devons, and him "For Sale." And a Durham Cow from J. J. Mapes, whose large protuberant bones stuck out as if she was an advertisement of the "Professor's" bony phosphate. But, methinks the day must soon come when rural New-Jersey will set about availing herself of the advantages which her proximity to those sores on the body politic, large cities, now might give her; I do not mean a market for products her present soil fails to produce, but as supplying cheaply the ready means for fertilizing that soil, which, however poor it may be, is always grateful.

S. W.

Choking Cattle.—Mr. Geo. S. Palmer, of Richmond, Va., writes, referring to a former article in the *American Agriculturist*: "Let me suggest a sure and never-failing simple remedy, by using a wagon or carriage whip, putting the butt end down the throat and pushing the obstruction down. The elasticity of the whip will allow the neck to be thrown up or down in any position. Of course you must first get the sufferer by the horns."

We have in several instances used, and seen used, the implement above recommended. Great care is necessary, or the æsophagus (meat-pipe) will be ruptured. We prefer in all cases to try the oil first, as stated in our former articles. So, also, a handful of snuff thrown into the mouth and nostrils of a choked animal induces coughing, which often throws out the obstruction.—[Ed.

Tis' sweet to abuse ones relations but painful to hear them abused.

CORN, STALKS, THEIR VALUE FOR FEEDING—EARLY RIPENING OF CORN, &C.

To the Editor of the American Agriculturist:

If any one of the herbaceous grasses will pay the labor and expense of early cutting, covering, and drawing, with juices unimpaired by either molding, or fermenting into the sour state, it is the stalks of the Indian corn, and more especially the shriveled or sweet variety. I have stalks of this corn cut as the green ears were plucked in August, and dried in an open shed, they are now half as rich in sugar as the dried stalks of the sugar cane. If your city M. D.'s, instead of denouncing still-fed cow's milk as unhealthy, could have made it obligatory on the feeders of these cows to supply them with small rations of sweet corn stalks, (which may be obtained from your market gardeners), this would replace the sugar which is taken from the slop to form alcohol. Then still slop, barring the odium of its lost associate, alcohol, will be found the full equivalent of hasty pudding?

But to have corn fodder in perfection, with fragrant leaf and saccharine stalk, it should be planted early, since a perfect crop in stalk and its juices, no less than in its cereal product can not be made outside of the longest days and shortest nights of three summer months. When I hear a farmer say, "if the frost only keeps off I shall have good corn," I set him down either as no farmer, or one who has no experience in corn growing. In no good corn growing region do the early frosts cut off a crop of corn that would have ripened well had the frost kept off. Corn only grows and matures fast and well with a temperature of 80° and over, by day, and not less than 60° at night.

It has been asked why late planted corn has barren stalks and fails to ear as well as that which is planted only two weeks earlier? I reply, that even if ears form, they can neither grow nor fill after the long and cooler nights commence, as it takes all the warmth of the shorter day to counterbalance the chill that the plant has received through the lengthened night. For this very reason good corn of the large variety is never grown in the equatorial regions, where twelve hours night sinks the thermometer much lower than it falls in our shorter summer nights.

The great value of corn grown expressly for late summer soiling of milch cows in particular, I will illustrate by giving the very successful example of our amateur farmer, Joseph Wright, who keeps up the yield of milk from his twelve fancy cows, through the dry season, each cow nearly filling a pail at a time, while some farmers milk five to seven cows into one pail. His cows run in as good pasture as our calcareous region affords. But as this fails under our long continued summer drouth, Sweet corn in drills from the same cause becomes rich in saccharine matter, in which state it is most nutricious. This is cut in August, September, and October, and fed to his cows at milking time. In August much is cut and dried, and mowed away on top of his hay, &c., for winter feed, always disposing it in a way that the juices of the stalk may neither mold nor sour. If any man doubts the value of full grown Sweet corn stalks (that have matured a crop of ears) for milch cows in winter, let him cut up a pail full of the butts that have their sugar unspoiled, and then another pail of English turnips, pithy as they are in winter, and place them before his cow; she will invariably take the sweet stalks first; and who has not as much faith in her practical judgement, as in any mere pen and ink, chemist's analysis?

Waterloo, October 10, 1856. S. W.

BEST MODE OF SAVING POTATOES.

To the Editor of the American Agriculturist:

Your correspondent asks how potatoes are best saved? Gen. Barnum, of Vergennes, Vt., had his potatoes gathered by shaking the tops into the wagon, dirt and all, and conveying immediately to large bins in the cellar, when turf, carefully cut, was placed closely upon the surface to exclude air. He succeeded well.

I fell in with a gentleman from Virginia, reared in Connecticut, who said he ordered potatoes from Connecticut every year, and that they were dug in cloudy weather, or just at twilight, and immediately barreled up, and kept from the light as much as possible. He found no other modes equally good. His potatoes were excellent.

An Irishman became celebrated in one of our cities for furnishing excellent potatoes. Taking advantage of his celebrity, he was paid one shilling a bushel more for potatoes than the market price. But presently it was discovered that his potatoes were no better than others brought to market, unless his directions were followed—to have them placed in a barrel, in the *dark*, and excluded from the air.

These hints come too late for this potatoe harvest; but may save some in disposing of their Winter's stock, and be remembered hereafter.

But *poor* potatoes will be poor, kept any way. Choice kinds should be planted on dry sweet soils, and dug before they are saturated with Fall rains. And good potatoes need to be well cooked. Let the cook take off the skin with a knife, *once* round the potato. Boil constantly till cooked. The water to be *drained* from them and the potatoes left uncovered to steam off. Serve them up with the skins on. Many a good potato is spoiled in cooking. Profited by the hints furnished by others, I cheerfully furnish these in return.

Fayette Shipherd.

Pulaski, Oswego Co., N. Y.

Keep Weed Seeds out of Manure.—Some seeds will live through almost any usual fermentation of the heap, and besides it should not heat and ferment. Many weeds cut in flower will still ripen seed, and as a general thing the seeds of our most pernicious weeds are most tenacious of life. The fire is the proper place for them, and as ashes they are harmless and profitable.

Orchard, Garden, Lawn, &c.

DWARF PEARS—WINTER TREATMENT.

Many suppose, that when the fruit is gathered, there is no further need of attention till vegetation starts anew in the spring; but this is a great, and not unfrequently fatal mistake. Among the most destructive insects to which the Pear, in common with other trees, is liable, is the "scaly bug" (cocculus), which gives the tree the appearance of being covered with white specks, and which the inexperienced little dream of being insects destructive to its vitality. A tree covered with scale is in a condition similar to that which a man would be in, with his body covered with scores of hungry bloodsuckers, drawing out his very life. The comparison is a strong one, but none too much so. No tree can long maintain its health and vigor, unless these pests be removed. A careful and experienced cultivator will never allow them to accumulate in great numbers; but it is only a too common sight to see these insects in such masses as to make the tree a filthy object to touch. It becomes sickly; the new growth s weak and spindling; the leaves assume a "sear and yellow" look; utter barrenness ensues; the tree finally dies; and then follows another lamentation over "our failure" to grow dwarf Pears. It would have been a marvelous thing indeed if you had succeeded. We have no doubt that more than half the failures to grow dwarf Pears may be traced to bark lice and scale. The simple fact is, that *cleanliness* is quite as essential to health in a tree as in man. A plant will no more thrive covered with lice and dirt, than will a human being. We find the opinion to be quite common, that the scale is killed by the winter's cold; but this is a great error.

Now for the remedy. We prefer a weak solution of whale oil soap, or a pretty strong one of soft soap. The solution is best applied by a long, narrow brush; if this can not be had, a common scrubbing brush will do; and it must be used with some vigor. As soon as the leaves have fallen, go over all your trees in order, and such as are in the least affected with scale should be well scrubbed; from the others remove all caterpillars' nests, and every thing else that can harbor an insect. We would recommend, however, that all the trees be treated with the above solution as a part of the regular routine of cultivation. They will be greatly benefitted by it; and thousands of insects, knits, and eggs, many of them quite invisible to the naked eye, will then be destroyed. Clean the ground around the trees from grass and weeds, and loosen it up with a fork If you have a good supply of manure, spread on two or three inches of it, and fork it in in the spring. If, however, you are not well supplied, do not apply it till spring, when half the above quantity may be forked in at once. Your trees will now need no further special attention till the season of pruning arrives, when we shall recur to the subject again.—Ed.

CHAPTERS ON PEAR CULTURE—NO. I.

BY DR. L. B., NEW-JERSEY.

[The following interesting article was written by a gentleman who modestly suppresses his name, but his initials, which we have taken the liberty to give, will be readily recognized, by Pomologists especially. It is in reply to our request for a plain, simple article adapted to the comprehension of the great mass, who have heretofore given little or no attention to the cultivation of pears. The writer, (a native of France,) being fortunately free from the necessity of growing pears for a livelihood, is devoting his whole time and attention, and no little expense, to improving the production of this valuable fruit. We hope for good results from his experiments and extensive investigations continually being made. We are promised future articles from his pen, which we shall value all the more highly, as the writer, not being a seller of trees, has no "ax to grind," and is seeking only for the truth.—Ed.]

To the Editor of the American Agriculturist:

Your note containing "questions on pears," is received. I doubt if I may consider myself sufficiently qualified to give satisfactory answers; however, to comply with your desire, I will give you as briefly as I can, the results of my experience and observation, though I would not wish to be considered as "authority." Everybody can make trials as I have done. I shall be gratified if I can say anything to prevent planters of pear trees from being misled by empty theories, by prejudice, or by the crude opinions of those who have given little attention to the subject, but who have been ready to publish the results of their errors and carelessness as settled rules and evidences. But without farther introduction, I will take up your questions designed for beginners:

> "What is the difference between a *dwarf* and a *standard*, and how is the dwarf produced?"

The Standard is a tree grafted or budded upon a plant of its own family. For example: a pear grown from the seed, or one grafted on a native pear root, is a standard. The seed or pit of apples and pears produces almost always a *wild* tree, only fit for budding or grafting with good varieties. The wildest (or cider) fruit gives the best seed for hardy stock. Seed of refined varieties should only be used for experimenting to produce new varieties. Their offspring are weaker, and, as in the apple, are unfit to make good standards.

The Dwarf tree is a variety of fruit grafted or *worked* upon some stock nearly allied to the original tree, but of different habits and character.

The pear can be worked upon the quince, the hawthorn, the medlar, the mountain ash, the azerolier, and the amelanchier; but the only really good dwarf stock is the Angers or Orleans quince, which is the only one in use in the nurseries. Unless the *proper* quince stock be used, no good result must be expected. I have seen some singular mistakes in publications, for want of proper attention paid to the question: *whether their trees had been budded upon the Angers, or upon the indigenous quince*, the latter being very inferior, if not worthless.

For the dwarf apple tree we have the Paradise stock and the Doucin—the first a real dwarf; the second between a dwarf and standard. Very many of the apple trees planted in our orchards are only *Doucins*, and are badly injured by the wind. A real apple standard, with stiff, spring-like roots, in good bottom, will not easily bend or give way in a storm.

The quince stock for nurseries, as well as the paradise, is produced from the twigs or branches heeled or laid in before winter, and planted early in the spring. This operation succeeds better in damp and cool climates, and in sandy soil, than in this part of the United States. Therefore most of these plants are imported, (chiefly from France,) although they can be produced here, with proper care, in soils fitted for them.

Pear seedlings, and I believe quince stocks also, are now obtained in large quantities in the nurseries of Rochester, Syracuse, &c., &c. I do not know if they are as cheap, all things considered, as the imported stock, but I have no doubts as to the possibility of raising them here.

And now comes that much controverted question:

"*Will quince-grafted pears do?*"

I have no hesitation in replying, "Yes, they will,"—and often better than on pear stock; and they are less subject to blight. I know that I do not agree with the opinions of my late friends, Van Mons & Espere, who never would admit a quince stock in their experimental gardens. I respect their memory, but cannot help considering their opinions as a prejudice. They had not found out the good quince stock, and perhaps did not know how to plant quince-grafted trees. I myself did not know it then. At present, my best trees are on the quince; and my best fruit also. Those who would successfully cultivate the dwarfs must pay attention to the following rules:

1. Have a good, substantial, rather deep soil, with porous or drained subsoil.

2. Select the good Angers, or Orleans quince for stock.

3. Plant no other varieties than those which succeed on the quince.

4. Plant the trees deep enough, so that the place where they have been budded shall be at least three inches below the surface of the soil. In rolling ground, cover with stones, or damp mould, so as to prevent the washing away of the light soil.

5. Keep the weeds down.

6. Keep the branches low, and make a pyramidal tree, by judicious pruning once or twice a year. If well pruned, the tree requires no pinching. A tree with a heavy, high top, must not be upon the quince. Levels or gentle slopes are better than hills or rolling ground.

It is a fortunate circumstance that most of the best market varieties are also best suited to the quince stock. Very often the grafted tree, when planted in silicious (sandy) soil or loam, forms its own roots just where it has been budded; and then,

with the steadiness of the pear stock, it retains the fertility of the quince.

Much has been said about the *short-living* of the quince stock. If properly planted in genial soil, which is not exhausted or impoverished by intervening field crops without a reasonable supply of manure, as most of our apple orchards are; if free from ill weeds and shrubs, and other drawbacks, the quince-grafted tree will thrive for fifty years or more. Some actual facts will prove what I state. Hon. M. P. Wilder has in his garden in Dorchester, trees which he bought from the widow of Mr. Parmentier, Long Island, some twenty years ago. They have yielded fine crops almost every year. Some have been regrafted with new varieties; one of them with Beurre Clairgeau, which bore this year between one and two bushels of the finest and largest pears. These trees look healthy, despite all their mutilations, and there is no reason to anticipate a diminution of growth or crops. These trees are *on the quince*, but they have been planted by a man who knows how to manage trees.

In the same garden are some fine Urbanist trees,—a part on the pear, and a part on the quince,—planted in the same spot, in the same year. Those on pear roots are now beginning to bear some spare fruits, while the others, on quince, have yielded bushels of fruit for the last seven years, and are actually loaded with a splendid crop. All are equally healthy; but, those on pear stock, not having exhausted part of their vigor in the best marketable produce for years back, are rather more vigorous. By thinning the crop early, so as to make it moderate, those pyramids may be easily brought up to the full vigor of their unproductive neighbors. Now comes the important question,

"*Will quince roots do for orchards?*"

For orchards, as we find them on most of our farms, a promenade ground for cattle, a dreary waste of ill weeds, badly cultivated and shallow soil, stagnant water, injudicious selection of varieties, and more injudicious pruning with axes or dull shopping knives—no, sir! No fruit tree of a refined class, no tree of any value, will do in such conditions. One half of the trouble, manure and labor, which a poor vineyard requires in France, would make a thrifty pear orchard, and would certainly pay better.

Let us look at some fine nurseries, or orchards (schools), where specimen trees are cultivated with care, and in proper soil and localities, and facts, those stubborn things, will soon bring conviction in the place of doubts.

Messrs. Elwanger & Barry, and others, in Rochester; Mr. Wilder and Mr. Hovey, near Boston; Chas. Downing, in Newburg; Dr. Grant, near Peekskill; Mr. Reid, Elizabethtown, N, J.; and many others, cultivate the pear on the quince stock with the best results. At Mr. Chas. Downing's, where every fruit and flower is cultivated in perfection, the surface of the ground in the dwarf orchards is covered with straw, refuse hay, &c., and no care nor cultivation is required; no weeds find their way through that carpet, renewed or supplied with new straw or brush every two or three years. Mr. Downing seems to be perfectly satisfied with his system, and indeed he must be.

In conclusion, let me say that, when one expects to reap the fruit of industry, he needs to give the proper attention to it; if he expects a fruit tree to yield crops of the most refined fruit, and to grow as a maple or a cedar in the woods, he is badly mistaken. The old saying that "a tree must take care of itself," is nonsense, when applied to fruit trees of improved kinds. It would do as well to plant *dahlias* or *prairie roses* in a swamp, or among thistles and briars.

A great deal more remains to be said, but I have already extended my remarks too far.

He who wants large crops of pears, indifferent in size or quality, may plant all his trees on the pear stock, in deep soil; but he has to wait from ten to fifteen years. If you want large fine fruit, which, in fact, pays better with less trouble and expense, select your varieties on the quince. These will often bear the first year, and always the third or fourth from their planting. If I had thirty trees to plant, twenty should be on the quince, the balance on pear stock.

Some varieties will not grow upon the quince, but even these do well *double worked*, that is, budded or grafted upon a variety worked already upon the quince and succeeding upon it. The French call it *intermediary grafting*.

In planting orchards, the same care and the same digging is required for a standard as for a quince stock, but how different the result? Ask Mr. Hovey, and others around Boston, from which they derive their largest profits. They all agree that the quince root has paid the soil, the expenses, tree and all, long before a *pear stock* has shown any sign of bearing.

Below is, according to my own and my friends' experience, a list of varieties which will do for the market, till new and as good varieties can be added. We must consider that the introduction of new varieties of fruit into the market is not an easy thing. Those named below are also the best adapted to the most of the States between 30 and 42 degrees of north latitude.

I.

Varieties of pears which do well on the pear-stock or when double-worked.

Those marked *a* do not succeed well on quince stocks. Those marked *b* do bear as early and as well as others on the quince. They are arranged according to their value for general cultivation, market purposes, &c.

b. Bartlett—Sept.
b. Madeleine—Aug.
a. Seckle, (sometimes does well on quince.)
b. Beurré Clairgeau—Oct., Nov.
a. Columbia—Nov
a. Dix—Dec.
a. Doyenne Boussock—Sept.
a. Lawrence, (often good on quince)—Nov., Dec.
a. Heathcot—Sept.
a. Onondaga—Oct.
a. Kipgsessing—Sept.
a. Pratt—Sept., Oct.
— Philadelphia—Sept.
b. Buffum—Sept., Oct.

And many others. The above are all *good looking* fruits, and of course will sell readily.

II.

Varieties adapted to the quince-stock, which also do well on the pear-stock.

Louise bonne de Jersey—Sept., Oct.
Duchesse d'Angouleme—Oct, Nov.
Beurré Diel—Oct., Nov.
Vicar of Winkfield—winter.
Urbaniste—Oct., Nov.
Beurré Superfin—Oct.
Beurré Hardy (or Sterckman)—Sept.
Abbott—Sept.
Belle Epine Dumas—Dec., Jan.
Beurré d'Anjou—Oct., Nov.
Flemish Beauty—Sept.
Andrews—Sept.
Kirtland's Seckle—Sept.
Brandywine—Sept.
Steven's Genesee—Sept.
Doyenne d'Alençon—winter.
Glout Morceau—winter.

(The following are not so certain as the above, though succeeding well enough.)

Winter Nelis—Jan.
Dearborn Seedling—Sept., early.
Belle Lucrative—Sept.
Easter Beurré—winter.
Easter Bergamot—winter.
Bonne d'Ezeès—Sept., middle.
Beurré Clairgeau—Oct., Nov.
Columbia—Nov., Dec.
Doyenne Sterckman (the true Beurré St.,)—Sept., Oct.

III.

Amateur's Fruit on Pear-stocks.

Fulton—Sept., Oct.
Sheldon—Sept., Oct.
Washington—Sept.
Beurré Bosc—Oct.
Calebasse Bosc, (Paradise of Autumn)—Oct.
Westcott—Sept., Oct.
St. Ghislain—early Sept.
Beurré Haggerston—early Sept.
Bloodgood—early Sept.
Ananas d'Eté, (good on quince,)—Sept.
Cushing—Sept.
Calhoun—Oct.
Chancellor—Nov., Dec.

IV.

Amateur's Fruit on Quince-stocks.

Tyson—Sept.
Howell—Oct.
Meriam—Sept., Oct.
Oswego Beurré—Sept., Oct.
Sterling—Sept.
Ott's Seedling—Sept.
Brandywine—Sept.
White Doyenné—Sept., Oct
Nouveau Poiteau — Sept. Oct.
Doyenné Gris—Oct.
Henry the IVth—Sept., Oct.
Beurré Langelier—winter.
Theodore Van Mons—Sept.
Pius Ninth—Sept., Oct.
Figue of Alençon—early winter.
Berg'tte Sieulle—Sept., Oct.
Baronne de Mello- Sept.
Fondante de Malines—Sept., Oct.
Bergamotte Esperen—(all winter.)
Beurré Goubault—Sept.
Beurré Giffard—Aug.
Beurré Nantais—Sept,
Beurré St. Nicholas—Sept.
Beurré Dumortier—Oct.
Van Assche—Sept., Oct.

AMERICAN POMOLOGICAL SOCEITY.

The recent session of this Society held in Rochester, was well attended. The display of fruit was not as good as on some former occasions, in consequence of an unpropitious season. The discussions, however, were interesting and important, and we may hereafter recur to them. It was decided to hold the next session in the City of New-York, and we bespeak for the Society a generous welcome. We understand that the New-York Horticultural Society has already moved in the matter, and will extend to the Pomological Society the usual hospitalities. In this we trust they will be aided by our wealthy citizens and the municipal authorities as has been the case in Boston, Philadelphia, and elsewhere.—Ed.

THE CONCORD GRAPE.

This new variety, which caused so much discussion at its introduction some four years ago, is settling down to a place among standard fruits, in northern gardens. No grape was ever introduced with a louder flourish of trumpets, and few were ever assailed with severer criticism. It is gradually winning favor, and appears destined to become popular, where the Isabella will not ripen. A fruit grower in Connecticut recently informed us, that it has done remarkably well with him, ripened this year by the 1st of September, while the Diana did not mature until the 16th, and the Isabella not until the last of the month. This is valuable testimony to its early maturity. The price has fallen from five dollars to one, and is now within the reach of all who desire it. We hear of gentlemen, who are making large plantations of it.—Ed.

How they do it in Minnesota.—An editor of a Minnesota paper gravely states that one of his subscribers informs him, that *six weeks* after planting his corn it was fit for the table! Minnesota, no doubt, is a great country; our own opinion, however, is that in this case the editor was decidedly *corned*.

GRAPES UNDER GLASS.

WILL THEY PAY?

The grapes which grow without protection on all the hill sides of Southern Europe, can only be produced with us, in their perfection, under glass. The difficulty seems to be, not so much in the temperature of our climate, as in its great and sudden changes. The atmosphere is clear and hot enough to mature even tropical fruits and vegetables in the summer. But there is something peculiar in the constitution of the European varieties of the grape, that they will not flourish in our climate. Mr. Longworth, after a life of experience with them, has discarded nearly every one, and now looks to grapes of American origin for successful cultivation in vineyards.

The peculiarities of our climate have led to the cultivation of European grapes under glass. Vineries with heating apparatus were at first built, and this was thought to be essential to give them an early start, and to prolong the season sufficiently for them to ripen. But it was afterwards discovered that artificial heat was not necessary to ripen even the late maturing graperies, and the only advantage of heated varieties was to furnish grapes at seasons of the year that would otherwise be impracticable. By judicious management, with both kinds of vineries, a succession is kept up throughout the year.

These grapes are still articles of luxury, confined to the tables of gentlemen of wealth in the suburbs of our cities and villages, and to those in the city, who have long purses, and can procure them at the Broadway restaurants at one to two dollars a pound. They are now an indispensible article on special occasions at the fashionable Hotels, at extravagant parties, and at wedding entertainments. The caterer for these occasions can not do up the brilliant thing in his line, without Black Hamburgs, Muscats of Alexandria, and the magnificent Cannon Hall Muscats, which are so large that the uninitiated generally suppose that Hall is a misprint for Ball, as the size of the grapes are suggestive of ammunition for cannon. So great is the demand for these grapes, that the cultivation is constantly extending, notwithstanding the large outlay necessary for a vinery. Usage, to say nothing of table luxury and health, now demands of every gentleman of wealth, in the suburbs of our cities, that he should have a grape-house as a part of his establishment.

Besides these, fruit growers are turning their attention more largely to vineries as a means of increasing their income. No department of horticulture is making more rapid progress, and in none is information more eagerly sought. Cold vineries especially are becoming common, and Black Hamburgs, and the Muscats, are invading new neighborhoods every year. Hundreds within the limits of our circulation are debating the question of a vinery this fall, and are only waiting for the assurance that the investment will pay, to commence operations.

We recently met an amateur cultivator at one of our State fairs, who very kindly gave us some light upon this point. He showed upon the tables thirty-one varieties of grapes, most of them grown under glass. We were at his residence a few years since, when he was putting up his new vinery, and were glad to see so fine an exhibition of its products. This building is a span, one hundred and fifty two feet long, and accommodates 240 vines. The estimated yield of each vine, in a season, is twenty-five pounds of grapes, making as the whole product of the building, 4,000 pounds. These would sell readily at seventy-five cents a pound, by the quantity, making the value of the fruit three thousand dollars. Of course a gentleman with a large family, and an admiring circle of friends, (whose admiration certainly would not diminish with the grapes in the back ground), would not be able to dispose of the whole of his crop to ready purchasers. But with all the calls of family and friends, he had sold grapes this season to the value of fifteen hundred dollars. One who should go into the business for the profit would be certain of a product of three thousand dollars, with good management.

The cost of building this grapery was thirty two hundred dollars, some four years since, when building materials were a little cheaper than now. The expense of taking care of the vines, he estimates at the price of labor for two hours each day during the season. Though a man of extensive business, he has actually attended to his vinery himself. But suspose we put the whole cost of labor, fertilizers, interest of money and depreciation of property at five hundred dollars, it gives a clear profit of one thousand, saying nothing of the ton of grapes eaten and given away. If these were to be sold, it would give $2,500 as a return for an investment of thirty two hundred. Of course this sum will not be returned the first year after the grapery is built. The vines should produce nothing the first year they are set, and the second, but a few bunches as samples. But after that they will begin to be remunerative, and will pay a large profit.

This gentleman gave it as his opinion, that no kind of fruit growing paid as well as grapes under glass. He cultivates to sell rather than to take premiums at the fairs, and thinks it better economy for the producer to cultivate a larger quantity of fruit, which will sell for seventy five cents a pound, rather than to restrict the bearing of the vines, for large bunches and large berries, which will bring a dollar a pound or more. He informed us, that the demand was brisk for all he had to spare. Large quantities are marketed at the summer watering places, like Newport and Saratoga, as well as in the cities.

Gentlemen, who only care to supply their own families with this delicious fruit, of course will not need to build so large a vinery as this. A lean-to of half the length of this, and costing not more than four or five to fifteen hundred dollars will afford an abundant supply for eight months in the year.

Those who wish to go in to the business to make money, will need a much larger capital, and must either study the culture of the vine themselves, and give their personal attention to it, or employ a competent gardener to make this his chief business.

There is one very important advantage, which this crop has over many others. The cultivator has the complete control of the climate, and can regulate the heat and moisture to suit the wants of the plants. Insects are at his mercy, and a crop of fruit is almost as certain as the season. The fruit can all the while be kept under lock and key, and no pilfering village boys can rob him of the fruits of his toil.

There is another advantage in this kind of cultivation. It requires so much capital to carry it on, that competion is very much restricted, and the price of grapes is likely to be largely renumerative, for many years to come. There is never a glut in the market, and as long as the prosperity of the country continues, and fashion and luxury alike prescribe them at social entertainments, the demand must far exceed the supply. The price for good grapes grown under glass has seldom been, we believe, less than seventy five cents a pound, and the finer varieties, from forcing houses, in the spring, frequently bring two dollars and a half a pound. There can be no question that grapes will pay, and pay largely, according to the skill and capital invested in their cultivation.—Ed.

THE FLOWER GARDEN.

The garden has now been nearly disrobed of the charms which so long made it attractive, and its inmates are fast hieing to their Winter's repose. The Chrysanthemum still lingers to shed its glory on its departing companions; and here and there may be seen a clump of Sweet Alyssum, or a solitary Phlox, or an Antirrhinum, which seem loth to depart; but soon these, also, will follow their companions who have gone before. Now look about, and see if something may not be done for the security of the plants, and to give the garden a somewhat tidy appearance, even during the long Winter months. It is a practice with some to cover the flower beds with manure; but this is offensive both to the eye and smell, and is not, as a general thing, at all essential to the protection of the plants; moreover, it is a great waste. Manure should be dug under as soon as applied, and not allowed to "waste its sweetness on the desert air." We prefer a good covering of leaves to anything else, where protection is essential. If not already done, Dahlias, Gladioluses, Tigridias, Tuberoses, Erythrinas, and all other tender roots and bulbs, should be lifted, and stowed away in the cellar, or some convenient part of the green-house. Pompone Chrysanthemums, Antirrhinums, and other half hardy plants, will need a little protection, if the beds are not covered. Cut off the dead wood from Herbaceous and other plants, clean off the walks and lawn, and gather up all the dead wood and litter, to be dried and burned, and the ashes spread on the beds and borders. Make everything look as neat

and tidy as possible, and leave nothing till Spring which can be done now.—[Ed.

TO KEEP CELERY.

Many, especially amateurs, experience much difficulty in keeping this delicious vegetable during the winter. Where it has been grown in beds, (as it always should be in small gardens), nothing more is necessary than to cover it as it stands with a good thick coat of coarse manure; and it can then be dug at any time during the winter when it may be wanted. Where it has been grown in single trenches, it should be taken up and placed in a bed prepared as follows: Dig out the earth two spades deep and of any convenient width; lift the plants from the trenches with the earth adhering to the roots; put in a row of plants three or four inches apart, and throw some earth against them; then another row six inches from the first, and so on filling in the earth to the tops of the plants as you go along. When all the plants are in, cover the bed with a thick coat of coarse manure, straw, or litter of any kind; manure, however, is to be preferred. From such a bed the plants may be dug at any time during the winter. The bed may be made of less depth, but the plants will not keep as well unless the winter should prove mild. It is best, however, in all matters of this kind, to be prepared for the worst. It is not always, however, pleasant in winter to dig celery from a bed out of doors, and if a cool, airy cellar is at hand, the plants may be kept in good condition by placing them upright on the floor, and covering them with earth or sand, as directed above.—Ed.

ROOTS—KEEPING TURNIPS, BEETS, CARROTS AND PARSNIPS.

Turnips.—The largest raisers of rutabaga turnips in this vicinity, store them for winter and spring use in heaps or pits in the field. A bed is prepared, not by digging out a pit as is sometimes practiced, but the surrounding earth is shoveled in so as to raise it above the surface six inches to one foot, according to the usual dryness or wetness of the soil. They are sometimes stored in separate round heaps, in different parts of the field, to save carrying. Generally, however, they are put into windrows, say six feet wide at the base, and as long as may be needed. They are piled up as perpendicular as possible, like a sharp peaked roof, so as to shed rain. They are gathered when the frost begins to wither the leaves. The tops are cut off close at the time of pulling, but care must be taken not to cut the crown, as any juice that flows out soon ferments and produces decay in the roots themselves. For the same reason, the tap-root, and the smaller roots and fibres should not be cut or broken. Washing is injurious. When piled up, a slight covering of straw or corn stalks is put on, and successive coats of earth added as the weather grows colder. As it is desirable to keep them as cool as may be without freezing, we think no straw or stalks should be put under the earth covering. This plan is pursued by the Swiss farmers, as described in our October number.

Carrots, Beets and Parsnips.—These are all kept similarly, especially when designed for winter and early spring use. Parsnips, when not wanted until late in the spring, are better if left in the ground until the frost is thoroughly out. The most important point in preserving these three varieties of roots is, to keep them cool and away from the air. The best cultivators for this market put them in bins upon the sides of cool cellars, and mix with the roots a sufficient quantity of sand or any kind of moderately dry soil to fill up all the spaces between them, and leave the whole a solid mass, entirely covered. Put up in this way, they will keep perfectly well one season, and even two seasons. In the absence of cellar room, beets and carrots may be put in pits in the same manner as Rutabagas, only that they must be mixed with plenty of soil.

We think potatoes, turnips, and all other roots, will keep better if thoroughly mixed with clay or newly dug earth, whether in the cellar, or in heaps or pits in the field.—Ed.

CARPENTER'S WHITE PEACH.

This splendid peach has, we are glad to learn, been placed in the hands of nurserymen for propagation and sale. An intelligent friend says of it: "At all the shows where it has been exhibited, it has received the prize as a superior seedling Peach. It has had a four years' trial, and has sustained its character fully. It is not only one of the best, but one of the largest Peaches ever raised. The flesh is uniformly white to the pit. It ripens about the second week in October. Having had opportunities of testing it for three years past, I do not hesitate to say that I consider it a very great acquisition."

Dr. R. T. Underhill's Grapes.—We have occasionally seen a "slant" at Dr. Underhill's method of grape culture, but the Doctor keep's right on, and "shows his faith by his *works*." At this time (October 6th,) you can scarcely pass a fruit stand, or store in this city without seeing immense baskets or heaps of luscious clusters of this pleasant fruit, and the best of these are always labeled R. T. U. As we write this item our mouth waters over a basket of magnificent Isabella's and Catawba's, right from Croton Point, or rather from the Depot at 293 Broadway, where any doubter of *our* verdict as to the superiority of Dr. Underhill's grapes, is invited to walk up and see for himself.—Ed.

Cauliflower—Hovey's Early Alma.—Mr. Henry Gillespie, gardener to Isaac P. Martin, Esq., of Fort Washington, N. Y., has placed upon our table a noble head of the above variety of Cauliflower, and shown us several other specimens, all of which are very large, clear white, and of fine and close texture. They measure 25 to 28 inches in circumference. The seed was sown May 15th. Mr. G. has tried all varieties, and esteems this decidedly superior to all others.—Ed.

FARMERS' DAUGHTERS—A PROTEST FROM ONE OF THEM.

ABOUT THE COMPARATIVE EDUCATION OF FARMERS' DAUGHTERS AND SONS.

To the Editor of the American Agriculturist.

In your October number of the Agriculturist, under the editorial head "Work for the Month," there are one or two remarks made in a tone of quiet sarcasm, which have somewhat aroused my indignation, for to my mind they are rather unjust. I think, sir, you have looked at what appear to be the facts in the case, without sufficiently studying the causes, or in other words you have "not found out just where the shoe pinches." After a dolorous lament for the good old times of husking parties, and the attendant rollickings, there is an evident disposition manifested to sneer at the so called *fastidiousness* of the Farmers daughters of the present day, on the supposition that they would, as a matter of course, turn up their noses at the mere mention of a husking frolic, or any other rural festivity. Then again comes a most uncalled for reflection. "The business has lost its charm in the eyes of the fair sex, and this we imagine has more to do with the reluctance of Farmers' sons to remain upon the old homestead than most people imagine." Verily a grave charge to bring down upon the devoted heads of country damsels. As though they ought to be made responsible for the erraticism of the young men who do but yield themselves to the necessity of the age, which impels them to go out into the world seeking new and more favorable fields of fortune than home presents. When the spirit of enterprise is made to take the right direction, then will there be a different class of young men who will be proud to devote themselves to the noble occupation of the Farmer. Do not think to call back the simplicity of a past age, when country lads and lasses were content with the homespun dress, and had not a thought beyond or above the annual huskings, apple parings, and like festivals of the olden time. *Our* "corn fed nymphs," are not so wanting in good sense as to *despise* the *profession* of their Fathers and Brothers. They are quite ready to admire all that is ennobling in the occupation. But there is one great mistake made by Farmers generally; they do nothing to elevate their calling, it is all dull, hard plodding, with little or nothing to relieve the monotony of constant labor. It is not to be wondered at that youthful aspirations are discouraged. If the functions of the brain were brought into more active operation, the labor of the hands might be more skilfully performed, and that which is often looked upon as a menial task, might, when the light of science is brought to bear upon it, be considered a matter of high import.

As regard the daughters of our good Farmers they are not educated after the manner of their Mothers and Grandmothers, and can not be expected to view things in the same light.

There is still another mistake to which attention might well be directed. The daugh-

ters are educated *far beyond the sons*. Is it strange then they should admire the grace of manners, and a degree of courtesy which is not usually discernible in a country bred youth. The boy who has imbibed a certain quantity of reading, spelling, and arithmetic is thought to be sufficiently educated for the farm. But with the daughter of the house a different system is pursued. At the age of fourteen or fifteen she is taken from the district school and advanced to the village seminary; after a while a higher degree of polish is thought necessary and she is sent to a fashionable boarding school in the city, to acquire a taste for the accompaniments of life in town. If such a discrepancy did not exist in the mode of education a different tone would prevail, and rough hands would not be despised. Why should not as high a degree of culture pervade the Farmer's family as is exhibited in that of any on the face of the earth. The amenities of life ought not to be considered puerile and of but little account, it is these *little things* which make the family circle attractive and elegant, and nowhere do they appear more charming than in the quiet repose of the old homestead. When these unobtrusive graces are found joined to a cultivated intellect, that man who possesses them will never be looked down upon by any woman be she of town or country.

A Lover of Justice.

Remarks.—We are happy to have received this protest, and to know that the facts presented in our article are admitted by one of the daughter's. The first step in any reform is to present the facts to the people and to gain their assent to them. It is admitted then, that the boys do run away from the homestead pretty generally, that those who remain are deficient in education, that the old folks pay more attention to the education of the daughters, than they do to that of the lad who is to abide by the homestead, and perpetuate their name, that the girls resent this short sighted policy and will not marry the half educated incumbent, though he have home and fortune. We are not particular about the philosophy that underlies these facts, and shall not quarrel with the causes assigned by our fair correspondent. We lament the facts and their causes whatever they may be. Attention is more strongly directed to this matter every year, and in due time a remedy will be found. We think the old folks are already beginning to discuss a change of policy. They do not exactly like so much education in the seminary, and so little in the kitchen for their daughters; so much education of Tom's muscles in the field, and so little of his brain in the academy. We think that the old folks will eventually hit upon a more symmetrical education for both sons and daughters. The truth is, they do not exactly like Tom's chances for a wife and their own for a daughter-in-law, if things go on in the present way. They have seen the result of this slender education for farmers' sons in their neighbors' families, and as for having such a wife for their Tom, as some of their neighbors have had to put up with for their sons, they could not think of it. They want somebody in the house that is "like folks," as Mrs. Bunker, would say, in the parlor as well as in the kitchen, somebody that can make a table look tasteful and elegant every day as well as upon set occasions, in short a well bred and womanly wife for Tom.

So, Miss Loveress of Justice, be pleased to modify, somewhat, your displeasure at our statement of facts. We venture to assure you, that Tom will go to the academy this fall, that he will be brushed up both in his inner and outer man. His older sister just graduated from the Holyoke Seminary, has already given him some lessons on propriety, on keeping his hair brushed and his boots clean, and on the proper mode of saluting young ladies in the street, and of introducing his sisters and female friends, to new acquaintances. His younger sister still in the seminary in the city, though she declares Tom a boor, and a clown and all that, has invested in a tooth brush for him, evidently with a view to his reformation. His trunk is already partly packed and among other choice literature, a Chesterfield has been put in by the purchaser of the tooth brush. Tom takes all these things meekly, and soliloquizes as he looks at his comely face in the glass, "a boor she called me." He is in doubt about Chesterfield, whether the book belongs to the department of mathematics or fiction, but he will know all about it soon, when he gets to the academy. There the functions of his brain will be brought into more active operation, that the labor of the hands may be more skillfully performed. Tom will remember the parting injuction of his younger sister, and study the graces of deportment, as well as syntax and prosody. He will learn something beyond the vernacular of the farm, will indulge in rhetoric and be able to write a taking letter upon business or affection, as occasion requires.

When Tom has done all this, and education makes the most of his good qualities, when he is handsome in person, pleasing in manners, and well to do in the world, will Miss Matilda Wiggins, his town's woman, and second cousin, fresh from the school of Madam Chagairy, heed his addresses? Will not her taste "for the accompaniments of life in town" disgust her with country life? Will it not be "horrid dull" with any body in the country? We take an interest in Tom, and should like to know our correspondent's opinion of his fate.—Ed.

THE HONEY KING.

We have had occasion every autumn to refer to the operations in "Sweets," carried on by Mr. M. Quinby, of St. Johnsville, Montgomery Co., N. Y., the well known author of the "Mysteries of Bee Keeping Explained."

We do not know what better proof could be given of the value of Mr. Quinby's teachings in reference to the best method of keeping bees, than the results he himself yearly arrives at. Two or three years ago we noticed as a remarkable fact that he brought to this market 4,000 pounds of nice honey. But the present year he has sold here 22,000 pounds! all produced by himself and immediate neighbors. What is more, he uses no "patent *hive*," but the honey is collected in small square, cheaply constructed boxes with glass sides, which are set upon the common hive, and the quality is so superior, and the form of boxes so convenient, that his honey commands a very high price.

The first lot of 14,000 lbs. arrived here a short time since, and went off at once for 25 cents per lb., including the weight of boxes. The past week he sold 8,000 pounds more, of various grades at correspondingly high rates.

Everything considered, we think Mr. Q., deserving of some distinguishing title, and we were at first inclined to call him the "Professor of honey making," but having recently become rather choice of the title of "Professor," we conclude to "assume the responsibility" of naming him the "Honey King."—Ed.

BOILED CORN PUDDING.

[The following extracts are from a letter written by one of our readers in Lycoming Co., Pa. We shall hope to hear from her frequently.]

To the Editor of the American Agriculturist.

* * * We have gleaned many useful hints from your paper, and would gladly contribute something in return. * * We were interested and amused with the "Hasty Pudding Poem," in the September number, and hope your chapter on "How to make Hasty Pudding," in the October number, will incite many housekeepers to learn the best mode of preparing so good and healthful a dish. You were quite right in saying that "not one in ten cook it enough;" but don't talk of only twenty minutes. [We said *not less* than twenty minutes.—Ed.] Two hours cooking is desirable. Put in plenty of water, and after it has once boiled, only a slow fire is required. With this precaution, I find no difficulty in preventing its scorching with an occasional stirring, say once in five minutes. Thus made, and eaten with milk fresh from the cellar or springhouse, (not forgetting to stir in the cream!) you have a dish to be relished by the most fastidious palate.

I send a recipe for a *boiled corn pudding*, which is not often made in this valley, though it may not be new to your Yankee readers.

Mix well together: 3 cups Indian meal; 2 cups of buttermilk; 1 cup of water; half a cup of butter; half a cup of sugar; 2 teaspoonfuls cooking soda, and 2 beaten eggs.

Put into a tin mould, covering the top with a cloth firmly tied on, and boil three to four hours. A convenient mould may be made by cutting off the top of an oyster can, and bending the edge over a wire. Serve with sweetened cream, flavored with nutmeg; or with butter and sugar melted with a little water, and a few spoonsfulls of currant jelly.

N. B.—The addition of fruit, either fresh or dried, is a great improvement—to many persons at least. Edith.

SEED WANTED.

We wish to purchase a few quarts more of the seed of the Chinese Sugar Cane, or Sorghum Saccharum, for *free* distribution among our subscribers. Any one having any to dispose of will please write us immediately, stating quantity, price, &c.—[Ed.

Improved Sheep in New-Jersey.—Mr. J. C. Taylor, of Holmdel, Monmouth Co., is securing a valuable flock of South Down sheep. He purchased fully one-fourth of L. G. Morris' flock, at the sale in June last, and has now just received a buck and four ewes of the same breed, from the flock of Jonas Webb, England. He paid 100 guineas ($500) for the buck, before shipping.

Mr. Geo. W. Coffin, will hold a sale of Live Stock, on the 12th inst. See advertisement

"A BAKER'S DOZEN."

It is desirable to have as many as possible of our subscribers begin and end evenly with the volumes, which will hereafter correspond with the year. To bring this about, all new subscriptions received during the next four months will be entered from January 1st 1857, unless specially ordered otherwise. But

TAKE NOTICE.

All *new* names for 1857, received during this month (November), will receive the November and December numbers *without charge*. Our agents and friends generally may therefore commence sending new names for 1857, at once. Such subscribers whether single or in clubs will get a "Baker's Dozen," that is *fourteen*, instead of *twelve* monthly numbers for a year.

WHAT SAY YOU FRIENDS?

Is not the Agriculturist worthy of your recommendation? Can you not conscientiously advise your neighbors to subscribe for it? We make no vain or unfounded boast when we promise you that the volume for 1857 (vol. XVI), will by far excel all its predecessors in real practical value. We have strong grounds for this promise. A success the present year beyond our most sanguine expectations gives a new zest to our labors. A large number of the best and most practical writers have given us assurance of their assistance during next year.

A large sum will be devoted to procuring superior, beautiful and instructive cuts, and the paper will be decidedly improved *in every respect*.

If the free offer of the two remaining numbers of this year will be an additional inducement to new subscribers we shall be glad to furnish them.

Advertisements.

TERMS—(invariably cash before insertion):
Ten cents per line (of ten words) for each insertion.
No advertisement taken at less than one dollar.
By the column or half column, $12 per column for the first insertion, and $10 for each subsequent insertion.
☞ Business Notices 20 cents a line.

MORGAN HORSES.

A PREMIUM ESSAY
ON THE
ORIGIN, HISTORY AND CHARACTERISTICS
OF THIS REMARKABLE
American Breed of Horses.
Tracing the Pedigree from the original Justin Morgan, through the most noted of his Progeny, down to the present time.
WITH NUMEROUS PORTRAITS.
TO WHICH ARE ADDED
Hints for Breeding, Breaking, and general Use and Management of Horses,
With Practical Directions for Training them for Exhibition at Agricultural Fairs.
BY D. C. LINSLEY, MIDDLEBURY, VT.
☞ New-York: C. M. SAXTON & Co., Agricultural Book Publishers, No. 140 Fulton-st. Price $1. Sent free of postage.

AUCTION SALE
OF LIVE STOCK.

The subscriber, having disposed of his farm, will sell at public auction, at his residence, on WEDNESDAY, the 12th of November next, at 12 o'clock M., all his live stock, consisting of
AYRSHIRES.
The thorough-bred prize bull Malcolm, 3 years old.
Do. do. cow Flora, do.
Do. do. heifer Effie, 1 year old.
Do. do. bull calf Roderick, 8 months old.
The cow and heifer in calf by Malcolm.
COTSWOLD SHEEP.
10 ewes, from one to five years old.
4 ewe lambs.
1 buck, 3 years old.
2 bucks, 1 year old.
1 buck lamb.
SOUTH DOWN SHEEP.
20 ewes, from one to six years old.
9 ewe lambs.
1 buck, 2 years old.
2 bucks, 1 year old.
1 buck lamb.
One pair of large, well-matched serviceable HORSES.
Terms.—A credit of four months with approved notes, payable at the Dutchess County Bank, Amenia, Dutchess Co., N. Y.
GEO. W. COFFIN.
118n125

BEES! BEES!
22,000 Pounds of Honey
IN ONE SEASON.
M. QUINBY,
the Author of the
MYSTERIES OF BEE-KEEPING EXPLAINED,
has sent to the New-York market this year, 22,000 pounds of Honey, besides having more on hand. He uses no "patent hive," but treats his little "busy bees" in a natural method, and they repay his care a thousand-fold.
Mr. Quinby's method is fully described in a work of near 400 pages, entitled "Mysteries of Bee-Keeping Explained." This will be mailed, post-paid, to any one remitting $1 to the Author and Publisher.
M. QUINBY,
St. Johnsville, Montgomery Co., N. Y.
N. B.—There are so many advertised humbugs, the Author has been kindly permitted to refer to Mr. Judd, Editor of the American Agriculturist. Those preferring it may send orders to the care of Mr. Judd. M. Q.
118n127

LINNÆUS RHUBARB BY THE THOUSAND,
PARSONS & CO.,
FLUSHING, near NEW-YORK.
OFFER FOR SALE THIS SUPERIOR variety of the PIE PLANT, at ten dollars per 100, or eighty dollars per 1,000 crowns. 117-118n112

SMALL EVERGREENS,
CHEAPER THAN IMPORTED.
PARSONS & CO.,
FLUSHING, near NEW-YORK,
OFFER FOR SALE—

	per 100.	per 1,000.
NORWAY SPRUCE, 1 year planted	$10	$80
do. 2 do.	12	100
SIBERIAN ARBOR VITÆ, 2 feet	40	
do. 2½ to 3 feet	60	
CEDRUS DEODARA, 2 feet	40	
do. 3 feet	60	
do. 4 feet	90	
ABIES MORINDA, 1½ feet	50	
RHODODENDRON CATAWBIENSE, 1 foot	50	

With many other varieties suitable for the trade, or for planting in masses. 117-118n114

PARSONS & CO.,
FLUSHING, near NEW-YORK,
OFFER FOR SALE AN ASSORTMENT of Trees and Plants which they have grown for the use of Amateurs, and have prepared, by frequent transplanting and other modes, for success in moving.
They are of fine size and symmetrical form, and among them will be found
STANDARD APPLES of fine quality;
STANDARD PEARS, PLUMS and CHERRIES;
PEACHES, APRICOTS and NECTARINES, on Plum stocks, and their own roots;
DWARF PEARS, of fine form, and ready for bearing;
GOOSEBERRIES and CURRANTS, str ng plants of the best sorts;
RASPBERRIES, Fastolf, Red Antwerp, Fillbasket, and other known sorts;
STRAWBERRIES, of all the best varieties;
NATIVE GRAPES, Isabella, Catawba, and other hardy varieties;
FOREIGN GRAPES; all the well known sorts, with some new varieties of great excellence. These plants are propagated from vines that have borne abundantly for some years, and are known to be correct.
Great care is taken in the cultivation of Fruit Trees, and none but those of the best quality are allowed to be sent out.

THE ORNAMENTAL DEPARTMENT

Contains Trees of all sizes for lawns and streets, including *Elm, Silver, Norway* and *Sycamore Maples, Catalpas, Lindens, Tulip Trees, Cypress, Larch, Willows, Ash, Abele, Oriental Plane*, and all the best varieties of deciduous trees.
It also includes EVERGREENS of fine size for single planting, and of small sizes at low prices, from one foot upwards, for massing; among them are *Norway Spruce, Balsam Fir, Austrian Pine, Hemlock, White Pine, Scotch Fir*, and other varieties.
The best Shrubs include many fine varieties at low prices, for massing, of which the *Rhododendron Catawbiense* can be particularly recommended for its fine evergreen foliage, showy bloom, and perfect hardiness.
The ROSES are cultivated in very large quantity, on their own roots, of all the most rare varieties, and to those who purchase in quantity, will be sold at greatly reduced rates.

THE EXOTIC DEPARTMENT

Contains a fine assortment of CAMELLIAS, grown as bushy rather than tall, slender plants; and also contains all the well-known varieties of exotic plants, and many rare sorts introduced from Europe annually. These are all carefully grown for those who desire plants of symmetry and beauty.
CATALOGUES of all the departments will be furnished on application. Great care will be taken in packing, and trees will be delivered in New-York, and thence shipped as directed.
117-118n113

ANDRE LEROY'S NURSERIES AT ANGERS, FRANCE.
MR. ANDRE LEROY, MEMBER OF the principal Horticultural and Agricultural Societies of Europe and America, and lately promoted by the French Emperor to the rank of Knight of the Legion of Honor for the best Nursery products exhibited at the World's Fair held in Paris, begs leave to inform his friends and the public that he has just published his new Catalogue for 1856, being more extensive and complete than that of any similar establishment on the Continent. It contains the prices, &c., of all the Fruit, Ornamental and Evergreen Trees, Shrubs, Roses, Camellias, Stocks, Seedlings, &c., &c, with the necessary information for importing same. His experience in putting up orders for America, and the superior quality of his plants, have been too well appreciated during a period of ten years to require further comment. The Catalogue can be obtained free of charge, on application to the undersigned agent, who will also receive and forward the orders. Mr. A. Leroy is happy in being able to state that his Nurseries were not reached by the inundation which so recently devastated a portion of the district in which they are situated.
ANDRE LEROY, Angers.
F. A. BRUGUIERE, Sole Agent,
No. 138 Pearl-street, New-York.
117-119n105

NEW CANAAN NURSERIES—Three and a half miles from the Danbury and Norwalk Railroad depot.—The subscribers are prepared to offer the largest and best assortment of Nursery stock the coming season, they have ever had, consisting of 50,000 apple trees, three and four years from the bud or graft; 40,000 peach trees, one year from the bud; cherry trees, pear trees, standard and dwarf. Also, a general assortment of Evergreens and other ornamental trees.
N. B.—We would particularly invite the attention of persons wishing to purchase largely, to our stock of apple and peach trees.
STEPHEN HOYT & CO.
New Canaan, Ct., Oct., 1856. 118n124

PROFITABLE EMPLOYMENT FOR THE WINTER MONTHS.
PLEASE TO READ THIS!
AGENTS WANTED.
EXTRA INDUCEMENTS FOR 1857.
☞ All persons in want of employment will at once receive our Catalogue of Books for the New Year, prepaid, by forwarding us their address. Particular attention is requested to the liberal offers we make to all persons engaging in the sale of our Large Type Quarto PICTORIAL FAMILY BIBLE, with about ONE THOUSAND ENGRAVINGS.
☞ On receipt of the established price, Six Dollars, the PICTORIAL FAMILY BIBLE, with a well bound Subscription Book, will be carefully boxed, and forwarded per express, at our risk and expense, to any central town or village in the United States, excepting those of California, Oregon and Texas.
☞ Our books are sold only by canvassers, and well known to be the most saleable. Address, (post paid,)
ROBERT SEARS,
No. 181 William-street, New-York.
116-119n120

FRESH IMPORTED HYACINTHS, TULIPS, &C.
THE SUBSCRIBERS HAVE JUST RECEIVED an unusually fine and extensive assortment of Double and Single Hyacinths, Tulips, Polyanthus Narcissus, Double Narcissus, Jonquilles, Crocus, Crown Imperials, Fritillarias, Gladiolus, Irus, Ixias, Lilies, Arums, Anemones, Ranunculus, Colchicums, Snowdrops, Aconites, Oxalis, Lachenalias, Amaryllis, Early Roman Narcissus, to which they invite the attention of amateurs.
Retail Descriptive Catalogues, with directions for culture, furnished applicants enclosing a stamp for return postage.
Dealers and Nurserymen supplied in quantities at as low rates as usually paid for the refuse bulbs from auction.
A good assortment of Hyacinth Glasses, Fancy Crocus Pots, &c., &c.
JAMES M. THORBURN & CO.,
No. 15 John-street, New-York
116-118n89

PEACH TREES FOR SALE.—A choice selection of kinds, both for the GARDEN and ORCHARD, of the most beautiful growth; worked from specimen-bearing trees, at $60 per 1,000. Also, ASPARAGUS, two years, $4 per 1,000. Other Trees and Plants low. EDWIN ALLEN,
116n122 Nurseries, New Brunswick, N. J.

THE LAWTON BLACKBERRY is the queen of all berries—of most magnificent proportions, exquisite flavor, and delicate texture.—*Springfield, Mass., Republican, Sept 4, 1855.*

Description of the Plant.—This is an original and entirely distinct variety, and not, as some suppose, the "New-Rochelle Blackberry," improved by cultivation, (the plants which abound in that neighborhood being no better than those growing wild in every other part of tae country.) It differs in shape, size and quality from every other known variety. For descriptive circulars and general directions for garden culture, forming plantations and pruning, address, WM. LAWTON,
New-Rochelle, N. Y., or No. 54 Wall-st.

N. B.—Plants will be furnished at a reduced rate to societies and clubs. 111—tfn42

LAWTON (OR NEW-ROCHELLE)

BLACKBERRY PLANTS.

☞ PRICES REDUCED. ☜

The subscribers have become Agents for the sale of the genuine Lawton (or New Rochelle) Blackberry Plants raised by Messrs. George Seymour & Co. of South Norwalk, Conn., and Messrs. Hallock of Milton, N. Y.

We are prepared to receive large orders the coming Fall and Spring, deliverable from the middle of October until the ground freezes, and from the middle of March until the middle of May.

PRICES.

$20 00	per hundred plants,	
11 00	"	fifty "
4 00	"	dozen "
2 25	"	half dozen "

Cost of package for a dozen or half dozen, 12 1-2 cents; for fifty or a hundred, 25 cents—larger packages proportionably less.

The name of the grower, who will *personally* superintend the taking up and packing with directions for setting and cultivating, will accompany each package.

The plants raised by these parties have been during the last year forwarded to *every part of the country*, and very few instances of failure have occurred, although the setting out has often been entrusted to unskillful hands.

Orders must be accompanied by the cash to ensure fulfillment.

We are permitted to refer to
Hon. Horace Greeley, Editor New-York Tribune;
Orange Judd, Esq., " American Agriculturist;
James J. Mapes, Esq., " Working Farmer;
Solon Robinson, Esq., Agricultural Editor New-York Tribune;
Thomas Drew, Esq., Editor Worcester Spy, Worcester, Mass.;
Stafford Cleveland, Esq., " Yates County Whig;
James S. Gibbons, Esq., No. 10 Wall-street, New-York;
Richard H. Manning, Esq., No. 54 Cortlandt-street.

N. B.—Orders should be given as early in the season as practicable, and will be filled in the order of their reception.

Pamphlets may be obtained of us on application by mail or otherwise, free of charge, giving statement of origin, history and characteristics, &c.

DREW & FRENCH,
Fruit and Produce Dealers,
116—118n97 No. 85 Barclay-street, New-York.

LAWTON

BLACKBERRY PLANTS.

The Subscribers announce to their friends and customers that they have now

OVER SIX ACRES
of the
GENUINE LAWTON
BLACKBERRY PLANTS

under cultivation, and in good condition.

They are therefore prepared to fill large orders the coming FALL and the following SPRING.

PRICES.

$25	per	Hundred plants.
$12 50	per	Fifty plants.
$5	per	Dozen plants.
$3 50	per	Half dozen plants.

N. B. All plants ordered of us will be TAKEN up and PACKED with the GREATEST CARE; and UNDER OUR OWN PERSONAL SUPERVISION.

Of the MANY THOUSANDS sent out by us last year we have heard very few instances of ailure, notwithstanding that they have been forwarded to EVERY PART OF THE COUNTRY, and the setting out has often been entrusted to unskillful hands.

Printed directions for setting and cultivating are sent with every package.

GEORGE SEYMOUR & CO.,
South Norwalk, Conn.

THE NEW-ROCHELLE BLACKBERRY.

☞ PRICE REDUCED. ☜

THE SUBSCRIBER, BEING ONE OF the oldest and most successful cultivators of this superior fruit, offers for sale well-rooted Plants of good size, carefully packed so as to go safely to any part of the world, and deliverable in November, March or April, at

$4 PER DOZEN, OR $18 PER HUNDRED.

Full directions for their cultivation given with each parcel of Plants.

N. B.—This is the same BLACKBERRY which is by some, though erroneously, called the "*Lawton*" BLACKBERRY.

ISAAC ROOSEVELT,
116 118n123 Pelham, Westchester Co., N. Y.

NEW-ROCHELLE (LAWTON) BLACKBERRY—Genuine Plants for sale on liberal terms by the subscriber. SIMEON LESTER,
Can apply for information at J. W. LESTER'S, No. 161 Water-street. } New-Rochelle, Westchester Co., N. Y.
116-121n104

WILLARD FELT, No. 14 Maiden-lane, Manufacturer of Blank Books, and Importer and Dealer in PAPER and STATIONERY of every description. Particular attention paid to orders. 5- 30

THE CELEBRATED MILTON RASPBERRY PLANTS FOR SALE.

A few thousand of the above will be disposed of at $15 to $25 per thousand.

ALSO:

Five hundred Milton or Newman thornless blackberry plants, at
Six dollars per dozen, or
Twenty five dollars per hundred.

E. S. WOOLSEY,
118n126 Milton, N. Y.

LAWTON'S BLACKBERRY PLANTS

PRICES FOR THE AUTUMN OF 1856.

Packages of Six Plants - - - - -	$3 00
Packages of Twelve Plants - - - -	5 00
Packages of Fifty Plants - - - - -	15 00
Packages of One Hundred Plants	25 00

Orders supplied in rotation as received, and none sold but the pure plants of MY OWN RAISING. A reduction to clubs. The money should accompany the order.

Packages of roots will be forwarded by any express or transportation line leaving New-York city. WM. LAWTON,
No. 54 Wall-st., New-York,
111—tfn41 or at New-Rochelle, N. Y.

THOROUGH-BRED DEVON CATTLE, AND ESSEX PIGS, FOR SALE.

The subscriber now offers for sale a few superior Devon Heifers, bred by himself entirely from recently imported stock, and in calf by his last imported bull, "OMER PASHA," winner of the FIRST PRIZE, as yearling, at the Royal Show of England in 1855; as also a number of young Bulls and heifers, the get of his three imported Bulls "MEGUNTICOOK," "MAY-BOY," and "OMER PASHA," and out of imported Cows, or their progeny.

Also, constantly on hand, ESSEX PIGS, bred from the best imported stock.

For full particulars as to age, price, pedigree, &c., address,
C. S. WAINWRIGHT,
1246n108—119N9 Rhinebeck, Dutchess Co., N. Y.

GREEN SAND MARL OF NEW-JERSEY.

THE NEW JERSEY FERTILIZER COMPANY is now prepared to receive orders for this important Manure. For all lands upon which ashes are beneficial, the MARL is more than a substitute. Professor Cook, in his Annual Report to the Legislature of New-Jersey, says:

"The value of these MARLS is best seen in the rich and highly cultivated district which has been improved (*almost made*) by their use. But it may be interesting to examine the causes of their great value in agriculture, and to compare them with other fertilizers. For example: The potash alone may be taken, at an average, as five per cent. of the whole weight of the MARL; a bushel, when dry, weighs eighty pounds; and in the proportion mentioned, would contain four pounds of potash; This is nearly as much as there is in a bushel of *unleached wood ashes.*"

And again: "It is probable that the great value of the MARL is to be found in the fact that it contains nearly all the substances necessary to make up the ash of our common cultivated plants."

Price delivered on board vessel at the wharves of the Company at Portland Heights, Raritan Bay, New-Jersey, seven cents per bushel.

For further particulars, see Circular, sent *free* of *postage*. Orders for other fertilizers will receive prompt attention. Address either of the undersigned.

CHAS. SEARS, President,
Riceville Post-Office, N. J.
TAPPAN TOWNSEND, Treasurer,
No. 82 Nassau-st., New-York.
GEO. W. ATWOOD, Secretary,
117-118n111 No. 16 Cedar-st., New-York.

PERUVIAN GUANO—*At lowest market prices*, wholesale and retail—with Government weight and brand on each bag, for sale at the
AGRICULTURAL IMPLEMENT AND SEED
Warehouse of R. L. ALLEN,
Nos. 189 and 191 Water-st., New-York.
ALLEN'S CELEBRATED MOWING MACHINE
CANNOT CLOG.

PORTABLE CIDER MILL AND PRESS.—This very desirable and approved machine I am now manufacturing in the best manner. It will make more cider than any other press with a given quantity of apples, and in a given time. The cider made from it is of the best quality. Cider can be made with this mill when, and in quantities as required. It is also useful for pressing currants, berries, cheese, butter, &c.
For sale by R. L. ALLEN, No. 189 and 191 Water-st.

SUPERPHOSPHATE OF LIME—Of Hoyt, DeBurg, and Mapes's manufacture.

GUANO, Bone Dust, Poudrette, Superphosphate of Lime, &c.

BONE DUST, ground and sawings.
Poudrette, Tafeu, Plaster of Paris.

Purchasers may depend upon getting these manures of best quality. For sale by R. L. ALLEN,
189 and 191 Water-st., New-York.

DRAINING TOOLS of all sizes, and of the latest improvements. Spades, Scoops, &c.
For sale by R. L. ALLEN, 189 and 191 Water-street.

BURR STONE and Iron Grain Mills.

PLOWS of all kinds. Wrought Iron Plows, and Plows with wrought iron Points.

HARROWS; Hay and Stalk Cutters.

SEED SOWERS, &c., in great variety.

FIELD and Garden Seeds.

ALLEN'S IMPROVED MOWER, AND MOWER AND REAPER—the best in America.

A large assortment of the most approved Agricultural and Horticultural implements, of good quality and at low prices,
For sale by R. L. ALLEN,
109— 189 and 191 Water-st., New-York.

NEW-YORK AGRICULTURAL WAREHOUSE AND SEED STORE.

FARMERS AND MERCHANTS WILL find at my Warehouse every Implelement or Machine required on a PLANTATION, FARM, or GARDEN. In addition to the foregoing, I would all attention to the following, among many others:

VEGETABLE CUTTERS and VEGETABLE BOILERS, for cutting and boiling food for stock.

BUSH HOOKS and SCYTHES, ROOT-PULLERS, POST-HOLE AUGURS, OX YOKES, OX, LOG and TRACE CHAINS.

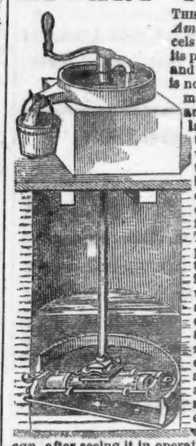
Grub Hoes,	Picks,	Shovels,
Spades,	Wheelbarrows,	Harrows,
Cultivators,	Road-Scrapers,	Grindstones,
Seed and Grain Drills,	Garden Engines.	

Sausage Cutters and Stuffers, Garden and Field Rollers, Mowing and Reaping Machines, Churns, Cheese Presses, Portable Blacksmith Forges, Bark Mills, Corn and Cob Crushers, Weather Vanes, Lightning Rods, Horticultural and Carpenters' Tool Chests.

Clover Hullers,	Saw Machines,	Cotton Gins,
Shingle Machines,	Scales,	Gin Gear.
Apple Parers,	Rakes,	Wire Cloth,
Hay and Manure Forks,	Belting for Machinery, &c.	

R. L. ALLEN,
189 and 191 Water-st., New-York.

Lindsey's Double-Acting ROTARY FORCE PUMP.



THIS pump has just been patented in *America* and *England*, and far excels any pump heretofore invented; its peculiarities are *simplicity, power*, and *cheapness*. Its simplicity; there is nothing about it but iron and cast metal, and it can be taken apart and put up by any one, and will last for an age. It has the power to raise water *hundreds of feet*, with the extra expense of $3 and the price of pipe. Water rises in it by hand 100 feet per minute! For cheapness; a No. 1. pump (for all ordinary purposes) complete, and fifty feet of pipe, costs but $30! The handle at the top, turns the pipe and pump, and every revolution fills the cylinder twice, affording an abundant supply of water with the least possible expense and labor, It is peculiarly adapted to *deep wells, rail road stations, salt works, mining and manufacturing purposes.* Wherever it is introduced, the old force, suction and chain pumps will disappear. Practical and scientific men pronounce it as without an equal, for all that is here claimed for it. The *Scientific American*, after seeing it in operation, says: "*This pump is very simple in construction, not liable to get out of order, durable, easily operated and economical; we regard it as an excellent improvement.*" Circulars with an accurate drawing and full description sent free of charge to all parts of the country. No. 1, has a one inch pipe; No. 2, 1¼ inches; No. 3, 1½ inches; and the prices $30, $42, $54; the No. 2 and 3 are designed for *very deep wells, railroad stations, &c.* where much water is required. The subscriber is the general agent for the sale of these pumps to all parts of the world, and *exclusive agent for* NEW YORK. Orders must be accompanied by the *cash*, and should be explicit as to the kind of pump wanted, depth of well, shipping address, &c. They will meet prompt attention. A pump and pipe weighs about 170 lbs. No charge for shipping or cartage. Wells over 50 feet should have extra gearing, which costs $3.

JAMES M. EDNEY,
Com. Merchant, 56 John St. N. Y.
For sale by H. LINDSEY, Inventor, Asheville, N. C.
113—118n69

HORSE POWERS AND THRESHERS.—I have for sale the best and most approved made in the United States, viz:

Allen's celebrated one horse endless chain power.			
Emery's Patent	do	do	do
Allen's celebrated two	do	do	do
Emery's patent two	do	do	do

Trimble's one to four horse iron circular power.
Warren's do do do do
Eddy's or Tasslin's superior wood and wrought iron one to six horse circular power.
Hall's or Pitts one to eight horse iron circular power, much used in California and other Western State

THRESHERS.

Allen's or Emery's Threshers with or without Separators.
Eddy's Iron Cylinder Threshers.
Hall's or Pitts and other make Threshers and Cleaners combined, for two to eight horses.
R. L. ALLEN, Nos. 189 and 191 Water st.

HORTICULTURAL TOOLS—A full assortment of Hedge and Vine Shears, Pruning Knives, Hoes, Rakes, Cultivators, Trowels, Forks, Watering Engines, &c. &c.

PLOWS—A large variety of patterns, among which are the most approved Sod, Stubble, Side-hill, Double-mold, Sub-soil, Lock Coulter, Self-Sharpener, &c.

CARTS AND WAGONS—With iron and wood axles, on hand or made to order, in the best and most ervice able manner.

LITTLE GIANT and other Corn and Cob Crushers.
For sale by R. L. ALLEN,
189 and 191 Water st., New-York

RUSSIA OR BASS MATS, GUNNY BAGS, TWINES, &c., suitable for Nursery purposes, for sale in lots to suit, by D. W. MANWARING, Importer,
111-126n110 248 Front-street, New-York.

FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY

IS NOW PREPARED TO SELL

ABOUT TWO MILLION OF ACRES

OF

FARMING LANDS,

IN TRACTS OF FORTY ACRES AND UPWARD,

ON LONG CREDITS AND AT LOW RATES OF INTEREST.

These lands were granted by the Government, to aid in the construction of this Railroad, and are among the richest and most fertile in the State. They extend with the road, from Chicago on the northeast, to Cairo at the south, and from thence to Galena and Dunleith, in the extreme northwestern part of the State. Most of these lands lie immediately on, and within six miles of the road, and none are more than fifteen miles distant from it; hence, ready and cheap facilities are furnished for transporting their products to any of the Eastern or Southern markets The great increase of population by immigration, etc., and the consequent rapid growth of flourishing towns and villages, on the line of the road and throughout the State, furnishes a substantial and growing home demand for every kind of farm and garden produce.

In the Northern and Central parts of the State, prairie lands predominate, interspersed with magnificent groves of oak and other timber; in the Southern, the timber is more abundant, and exceedingly valuable.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling, and peculiarly fitted for grazing cattle and sheep or the cultivation of wheat, Indian corn, etc. The air is pure and bracing, the climate more healthy, mild and equable than that of any other part of the Union; while living streams and springs of excellent water abound.

Economy in cultivating, and great productiveness, are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new land in the older States. The first crop of Indian corn, planted on the newly broken sod usually repays the cost of plowing and fencing.

Wheat sown on the newly-turned sod is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from $2 to $3 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, etc., will be forwarded at reasonable rates to Chicago, for the Eastern, and to Cairo for the Southern market.

Bituminous coal is extensively mined along the road, and supplies a cheap and desirable fuel; being furnished at many points at $1 50 to $4 per ton. Wood can be had at the same rates per cord. Extensive quarries have been opened in the southern part of the State, near the line of this road—or building stone of excellent quality—such as white and blue Limestone, and white and red Sandstone—which can be had for little more than the expense of transportation.

The Government lands, in the Land States, having generally been withdrawn from market, emigrants from the Eastern States and Europe can be accommodated by this Company with valuable farms, at the old prices and terms, which, in all probability, will double in value within twelve months.

When those lands are restored to market, persons who think of settling on them, or in Minnesota, should bear in mind that the lands of this Company, at the prices for which they are sold, are better investments than those in other States or Territories, more remote from market, at Government prices; for the reason that the expense of transporting the products of the latter to market will always be a heavy drawback on them, and after a few years cultivation they require manuring, which is not the case with Illinois lands.

The same remarks hold good in relation to the lands in the Territories of Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of those lands are carried either in wagons or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course, on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from $5 to $25, according to location, quality, etc. Contracts for deeds may be made until further notice, stipulating the purchase money to be paid in five annual installments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract, and the lands are not subject to taxation till finally paid for.

Interest will be charged at only three per cent. per annum.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the land purchased shall yearly be brought under cultivation. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

Ready Framed Farm Buildings, which can be set up in a few days, can be obtained from responsible persons.

They will be twelve feet by twenty feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, $250 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

It is believed that the price, long credit, and low rate of interest charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean time, the rapid settlement of the country will probably have increased their value four or five fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the Railroad lands throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, etc., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,
Land Commissioner of the Illinois Central Railroad Co.,
Office in Illinois Central Railroad Depot, Chicago, Ill.

118—126t123

THE INDEPENDENT,

A

WEEKLY RELIGIOUS AND FAMILY NEWSPAPER.

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from all sections of the Union; from England, France, Germany, Switzerland, Italy, and the Holy Land, contribute to enrich the columns of THIS JOURNAL.

That no other weekly religious newspaper ever met with the success of *The Independent* must now be universally admitted. It has been the aim of the proprietors, without regard to expense, to make it rank in point of talent as high as the best journal of a similar character in the world; and to make it popular *only* so far as this could be done by treading boldly and firmly in the path of Christian duty—"not as pleasing me, but God."

A crisis has arrived when every Christian is called upon to ask, "Lord, what wilt thou have *me* to do" in a conflict for principle and human rights as great as the world has ever seen. No voice can now be silent with impunity. If the religious press or Christian men now refuse either to speak or to act, the very stones will cry out for Heaven's sorest judgments, and we shall be left as a nation to fill up the measure of our iniquity.

Now is the time to prove who are the true lovers of liberty, and to demonstrate who are the worthy descendants of the fathers of the Revolution, who were willing to lay down their lives to secure for this fair country an inheritance of freedom.

The Independent will enter the field side by side with *all* who desire to do battle for *truth, justice,* and *humanity.* With all the power God may give it, it will urge the Christian public to do with their might what their hands find to do to save our beloved country from the death-grasp of Slavery. It will advocate freedom of speech, freedom of the press, free soil, free men, and —— Fremont for the next President. Those who think a religious paper should not thus freely join with the secular press in doing this extraordinary work, are informed that the matter has been calmly considered, the cost counted, and the conclusion deliberately and conscientiously arrived at, that duty to God and man precludes a moment's hesitation as to the course which ought to be taken by this paper. Those who sympathize with it, of every name and party, and they are *thousands,* will aid the cause by doing all they can to extend its circulation.

Those unacquainted with *The Independent* are informed that the paper will furnish articles weekly as follows:

1st. Religious Editorials. Selections, and current Religious News.

2d. Editorials discussing the great Moral and Political Questions of the Day.

3d. Communications from regular weekly contributors, embracing every variety of topic suited to a Christian family—to the *living,* not to the dead

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JOSEPH H. LADD,
Publisher.

August, 1856. 116-118n96

AGRICULTURAL ENGINEERS.—The undersigned, having long experience as Engineers, will pay attention to those branches of their profession connected with Agriculture, viz: Land Surveying and Mapping, the arrangement and construction of houses and farm buildings.—DRAINING and IRRIGATION in all their branches. Also, the adaptation of all machinery necessary for agricultural purposes, including steam engines, wind and water mills, water rams, force pumps, &c. Materials and machinery purchased on commission. SHIPMAN & HAMMOND,
111—121n48 No. 63 Trinity Buildings. 111 Broadway, N. Y.

THE TEETH vs. THE HEALTH.

EVERYBODY KNOWS the pleasures of an aching tooth, and nothing need be said upon that head. But

EVERYBODY does not fully appreciate how much good health depends upon having food well masticated, for which, of course, GOOD TEETH are necessary. Said the Editor of the Agriculturist recently:

"I have kept myself and my *Children* in *perfect health* during the present year, by simply taking especial care to have *every* particle of food thoroughly mashed or pulverized before going into the stomach. In this way nothing of a hard nature, like a piece of potato, fruit, meat or other food goes into the intestines to produce irritation, and the consequent diarrhœa, dysentery and other bowel complaints."

Every consideration speaks strongly in favor of preserving the teeth we have, and of supplying those already gone.

Those who wish any operations upon their teeth performed *honestly, carefully, skilfully,* in short, in the *best possible manner,* and upon *reasonable terms,* will do well to call upon DR. BENJAMIN F. ADAMS, at No. 122 Chambers-street, New-York, a little west of the City Hall.)

Dr. ADAMS has given exclusive attention to operations upon the teeth for over fourteen years, and confidently refers to the thousands of persons who have been under his care.

Dr. ADAMS may always be found at his office, so that persons coming in from the country may depend upon having any desired operation performed immediately on their arrival.

Whole or Part Sets of Incorruptible Teeth inserted without pain, on Gold Plate or Gutta Percha, excelling nature in beauty and durability, by aid of the various modern inventions and the subscriber's recent improvements. Spongy, bleeding, or ulcerated gums speedily cured. Partly decayed teeth saved with gold, tin, or patent fillings, and their preservation warranted. No impure gold or dangerous amalgams used.

Irregularities in children's teeth prevented, or of adults remedied. Cleansing, extracting, &c., &c., *all at low prices.*

Satisfaction in regard to color, form, and translucency of all teeth inserted, in block or single, is in all cases warranted.

The great delicacy and caution observed in all operations, with the aid of recently improved and superior instruments, dispense with all necessity of chloroform or other narcotics in the most irritable nervous system.

Teeth examined, and advice given *free of charge.*

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Such as Constipation, Inward Piles, Fullness or Blood to the Head, Acidity of the Stomach, Nausea, Heartburn, Disgust for Food, Fullness or Weight in the Stomach, Sour Eructations, Sinking or Fluttering at the Pit of the Stomach, Swimming of the Head, Hurried and Difficult Breathing, Fluttering at the Heart, Choking or Suffocating Sensations when in a lying posture, Dimness of Vision, Dots of Webs before the Sight, Fever, and Dull Pain in the Head, Deficiency of Perspiration, Yellowness of the Skin and Eyes, Pain in the Side, Back, Chest, Limbs, &c., Sudden Flushes of Heat, Burning in the Flesh, Constant Imaginings of Evil, and Great Depression of Spirits.

The Proprietor, in calling the attention of the public to this preparation, does so with a feeling of the utmost confidence in its virtues and adaptation to the diseases for which it is recommended.

It is no new and untried article, but one that has stood the test of a ten years' trial before the American people, and its reputation and sale is unrivalled by any similar preparations extant. The testimony in its favor, given by the most prominent and well-know physicians and individuals in all parts of the country, is immense, and a careful perusal of the Almanac, published annually by the Proprietor, and to be had gratis of any of his Agents, cannot but satisfy the most skeptical that the remedy is really deserving the great celebrity it has obtained.

Principal Office and Manufactory, No. 96 ARCH-street, Philadelphia, Pa. And for sale by all Druggists and Store-keepers in every town and village in the United States and Canadas.

117-119n116

REVIEW OF PRICES, WEATHER, &C.

AMERICAN AGRICULTURIST OFFICE,
NEW-YORK, Oct. 28, 1856.

During the month past there has been a gradual rise in the Breadstuff Markets, though, as shown in the table of comparative prices below, the total advance has not been very large. On flour for example, the rise is about 7 to 10 per cent. With a fair, but not over supply in the country, and a moderately fair foreign demand, there is a probability that about the present range of prices will continue, subject, however, to occasional speculation fluctuations.

The root crops have generally turned out an average yield. We as yet hear of no serious loss from Potato rot.

Fruit is scarce and already high. Those having Apples of Marketable quality should take good care of them.

The following table shows the total receipts of flour and grain in this city by Railroad, River, Canal and Coastwise, for 27 business days ending to-day:

Flour..	431,500 bbls.	Rye..	36,200 bush.
Wheat..	1,998,700 bush.	Oats..	107,000 bush.
Corn...	1,754,000 bush.	Barley,	59,200 bush.

We find upon our note-book records of the following sales in this city for 27 business days ending to-day:

Flour...	401,500 bbls.	Rye....	67,300 bush.
Wheat.	2,054,400 bush	Barley.	53,000 bush.
Corn..	1,494,500 bush.		

The following figures show the present prices of some of the principal agricultural products, and also the variations since our last report:

		Sept. 27.	Oct 28.
Flour—Ordinary State		$5 90@6 00	$6 50@6 60
Various Western brands		6 05@ 7 75	6 70@ 8 50
Favorite and Ex. State		6 30@ 6 65	6 75@ 7 00
Extra Genesee		7 00@ 9 00	7 25@ 9 00
Wheat—Canada White		1 56@ 1 63	1 70@ 1 73
Southern White		1 55@ 1 65	1 60@ 1 75
Southern Red		1 52@ 1 55	1 53@ 1 60
Western Red and White		1 40@ 1 63	1 65@ 1 80
Corn—Mixed		62@ 70	62@ 69
Yellow and White		65@ 72	69@ 75
Rye—New		86@ 88	85@ 87
Barley		1 28@ 1 30	1 15@ 1 30
Oats—Western, &c		38@ 46	38@ 47
Cotton—Middling and Fair		11¼@ 13	12¼@ 14
Rice	₩ 100lbs	4 00@4 62½	3 87@ 4 87
Pork—Mess	₩ bbl	19 75@20 00	20 75@21 00
Dressed Hogs	₩ lb	7½@ 8¼	7¼@ 8¼
Lard, in bbls	₩ lb	14¼@ 14½	12½@ 14
Butter—Western	₩ lb	12@ 19	16@ 21
State	₩ lb	15@ 22	19@ 25
Orange Co	₩ lb	22@ 28	25@ 30
Cheese	₩ lb	7@ 9	8@ 10¼
Potatoes—Carters	₩ bbl	@	1 50@ 1 62
Mercers	₩ bbl	1 50@ 2 25	1 50@ 2 50
Onions—Reds	₩ bbl	1 62@ 1 75	1 25@ 1 37
White	₩ bbl	2 00@ 2 25	2 00@ 2 50
Apples	₩ bbl	50@ 2 50	1 00@ 3 50
Eggs, fresh, per dozen			21@ 21½
Limed, " "			18@ 20

Beef Cattle have been in fair supply during the month. The receipts for *four* weeks, ending Oct. 22, compare as follows:

	1855.	1856.
Total of Beeves for 4 weeks	16,182	19,488
Weekly average	4,045	4,872

The receipts were, for week ending Oct. 1st, 5,614; Oct. 8, 4,220; Oct. 15, 5,544; Oct. 22, 4,110. The prices declined ½c. Oct. 1st, and again Oct. 15, making a total decline for the month of 1½c. per lb. net weight. On Wednesday last the prices ranged: Premium cattle 10½c.a11c. per lb. net or dressed weight; First quality 9c.a10c.; Medium quality, 8½c.a9c; Poor quality, 7½c.a8c.; Poorest quality, 7c.a7½c.; General selling prices, 8½c.a9c. Average of all sales about 8½c.

Sheep have been in fair supply, though less than for the same time last year, and prices continue higher. Receipts for *four* weeks ending Oct. 22:

	1855.	1856.
Total of sheep and lambs	62,235	52,041
Weekly average	15,558	13,010

Prices of Sheep and Lambs the past week have ranged from $2 to $9 per head, the majority of good animals bringing $3a$4 50 per head.

THE WEATHER.—Our weather notes, condensed, read Sept. 28, clear; 29 and 30, heavy S. E. rain storm with wind. Oct. 1, cool showers; 2d, heavy frost and some ice in morning, day clear and cool; 3d, clear and fine, milder; 4th to the 13th, inclusive, clear, fine and warm, with the exception of frost on the morning of the 4th, and a few foggy mornings; 14th, rain A. M., cloudy and cooler P. M.; 15, 16 and 17, clear and fine with frosty mornings—pretty severe frost on the morning of the 16th; 18 to 23, clear, fine and mild; 24 and 25, clear, with heavy frosts at night, considerable ice on the morning of the 24th; 26, milder; 27, rain; 28, clear, fine and moderate.

By the above, it will be observed that with generally a fine month, we have had, on the mornings of the 2d, 4th, 16th and 24th, unusually severe frosts for the season. Some fields of late buckwheat and corn were nipped, but no very extended injury is reported.

"You have only yourself to please," said a married friend to an old bachelor. "True," replied he, "but you cannot tell what a difficult task I find it."

'Tis a sad thing when a man has neither heart enough to speak well, nor judgment to help his tongue.

BUSINESS NOTICES.

☞ Persons forwarding money by mail may consider the arrival of the paper an acknowledgment of the receipt of the money.

BACK VOLUMES.

We have *only* Volumes XII, XIII and XIV. Price, Bound, $1 50.—Unbound, $1 00 per volume.

BACK NUMBERS.

We have sundry *odd* numbers of Volumes, XI to XIV, These will be sent free to those wishing to complete their volumes for binding.

Of Volume XV, we have several copies of October, November, December, May, June, and September, (Nos. 1, 2, 3, 8 and 9) and a very few of July and August (Nos. 10 and 11). These will be sent to subscribers post-paid, on the receipt of three 3-cent stamps.

In order to make the Volumes correspond with the year hereafter, this Volume (XV) will be continued to December, and contains 15 numbers. Subsequent Volumes will begin in January and end in December.

☞ We sometimes send (post paid) a spare copy of the Agriculturist to persons who are not subscribers. This is occasionally done as a compliment, and at other times to invite the person receiving it to examine its merits and see if it will not be worthy of a year's, or at least six months' subscription, by way of trial. Will those who may receive such copies please look them over, and, if convenient, pass them along to their neighbors? No one need take the trouble to return papers thus received—we never send the Agriculturist when we do not consider it *paid* for, and no one need fear to subscribe for a short period, lest they "can not get rid of it" if not wanted. The paper is always stopped when the time expires for which it has been ordered and paid.

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American Agriculturist.

(Established in 1842.)

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☞ The matter of each number will be prepared with reference to the month in which it is dated, and will be promptly and regularly mailed at least one day before the beginning of the month.

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All business and other communications should be addressed to the Editor and Proprietor,

ORANGE JUDD,
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